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IN  
BULK & BOTTLED.

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Butter Colouring.	GLASS BOTTLES.. 6d., 1/, 2/, 5/ Retail. 4/, 8/, 16/, 38/ per dozen. BULK..... 1/ per lb. 100/ cwt. in 2-gallon Bottles. 90/ in 1-cwt. Kegs. 85/ in 3-cwt. Barrels.	These Goods are selling well in the Agricultural districts. They are very attractively got up, are <u>superior</u> to any foreign makes, and are well worth the attention of the Trade, as they leave a good margin to the seller.
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Liquid Annatto, or Cheese Colouring.	STONE BOTTLES. 6d., 1/, 2/, 5/ Retail. 4/, 8/, 16/, 38/ per dozen. BULK..... 1/ per lb. 10d. in 2-gallon Bottles. 84/ in 12-gallons. 80/ in 3-cwt. casks.	
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Wholesale and Export Department—9 VERE STREET, W.

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CONTENTS REALISE £9.

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DESCRIPTION. — A Handsome  
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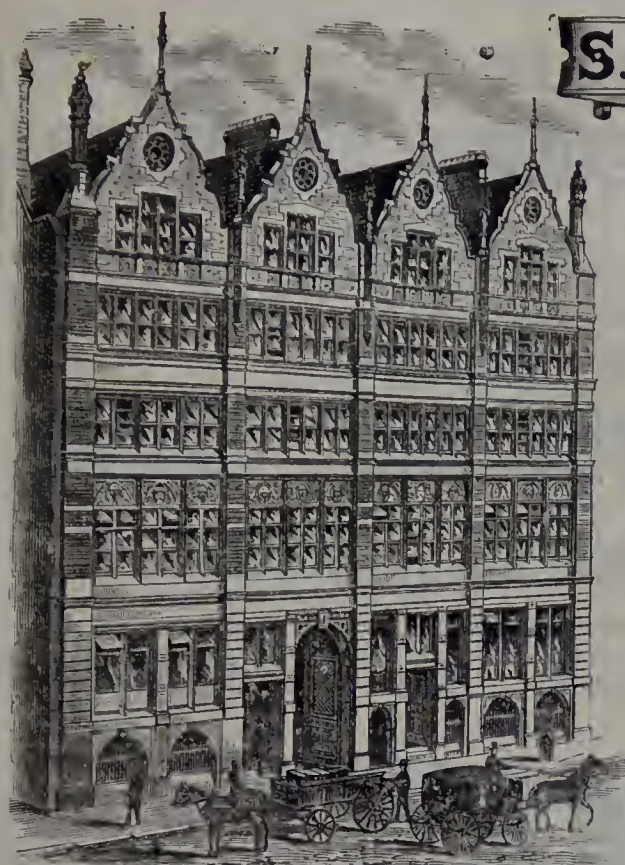
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Essential Oil of Almonds  
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ANTISEPTIC, AROMATIC, FLORAL, REFRESHING, PRESERVATIVE.

It contains no salicylic mineral acids, or bleaching corrosive alkalies. Instead of soap, which turns the teeth yellow, it is made with the harmless Saponin (South American Soap Bark), which lathers and cleanses beautifully. It is devoid of gritty matter commonly used to scour the teeth, and of acicular particles which cut and scratch while they whiten the enamel. It is also free from corrosives, injurious astringents, and irritating scents.

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The *British and Colonial Druggist* says:—"The 'Dentifrice' is sent out in elegant glass-stoppered vases enclosed in very neat cases. It consists of a very delicately perfumed powder, entirely free from the least trace of grittiness or alkalinity. In the mouth the sensation of smoothness and coolness produced is most grateful."

# Vinolia Shaving Foam.

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It is superfatted, and made with most demulcent materials. It is free from impure, rancid fats, and cheap, inferior scents. A refreshing emollient, it does not irritate, but on the contrary so lubricates the skin and affects the hair that the razor glides over the face with the utmost facility, affording a "clean shave" without injuring the epithelium or producing pimples.

The *Chemist and Druggist* says:—"The 'Vinolia Shaving Foam' is a superfatted substance of soft consistence, which lathers freely when applied to the beard, and by its emollient properties acts as a healing protective."

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"Chemical tests, too, show it to be without the least trace of 'free alkali.' The 'Shaving Foam' is one of the most pleasant preparations of the kind which it has ever fallen to our lot to use."

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VINOLIA SHAVING FOAM.—*In collapsible tubes*, 1/6.

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VINOLIA SHAVING SOAP.—1/-, 1/6, and 2/6 per Stick; Flat-Cakes in porcelain-lined metal boxes, 2/-.

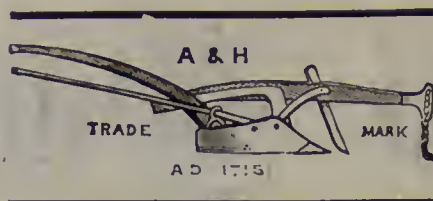
VINOLIA CREAM.—(For Itching, Eczema, Chaps, Chilblains, &c.) 1/9, 3/6, and 6/- each.

VINOLIA POWDER.—(For the Toilet, Nursery, Skin Roughness, &c.), in Pink, White, and Cream, 1/9, 3/6, and 6/- per Box.

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Silver Medal, Paris, 1878.



Philadelphia, 1876.



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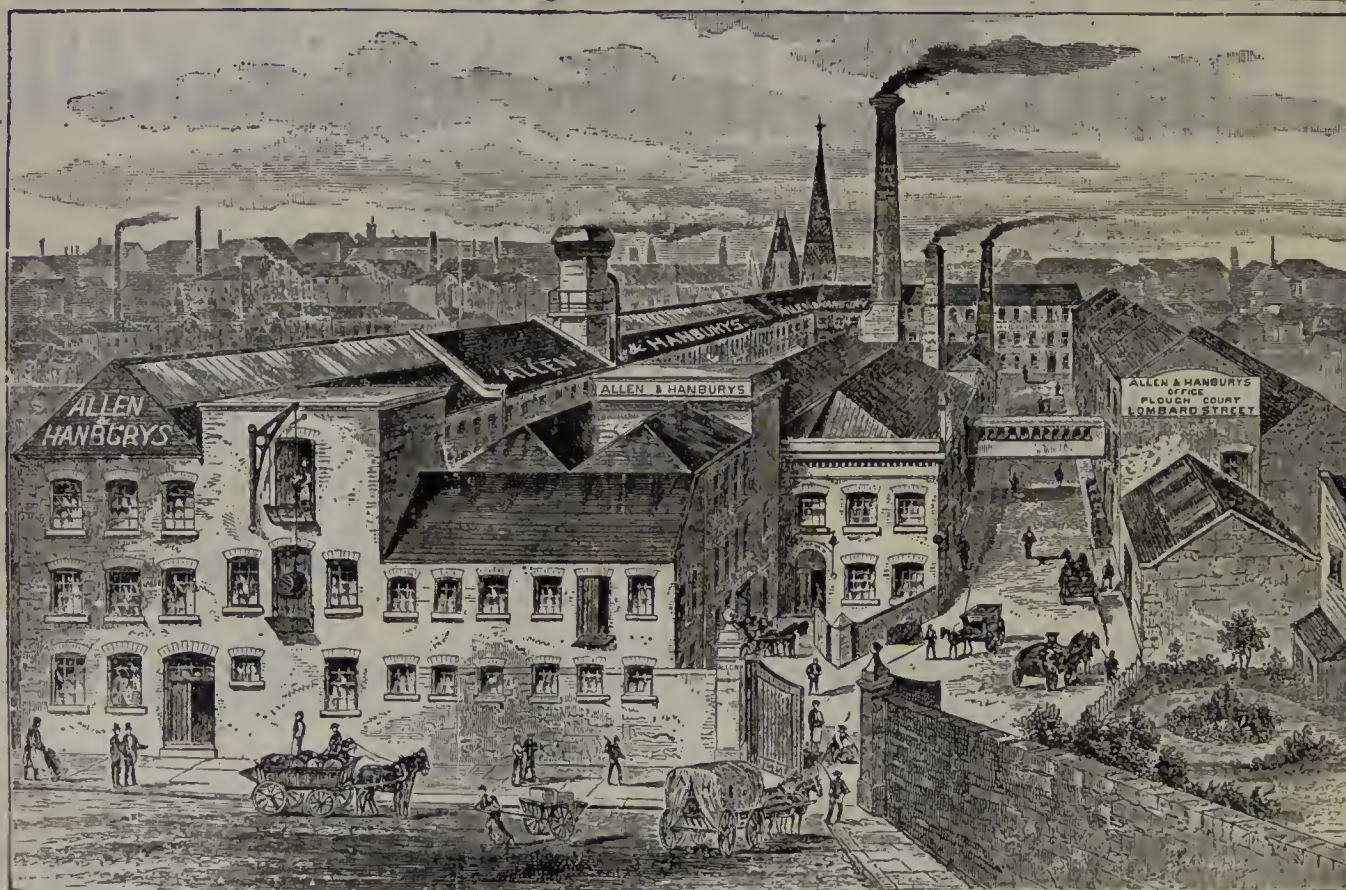
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# “Vinolia Soap.”

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# “Vinolia Powder.”

1/9, 3/6 and 6/- per Box, in Pink, White, and Cream.

# “Vinolia Dentifrice.”

English, 2/6; American, 1/6.

# “Vinolia Shaving Soap.”

1/-, 1/6 and 2/6 per Stick. Flat Cakes, in porcelain-lined metal boxes, 2/-

# Vinolia Shaving Foam.

In Collapsible Tubes, 1/6.

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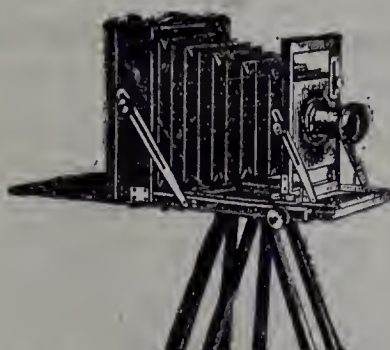
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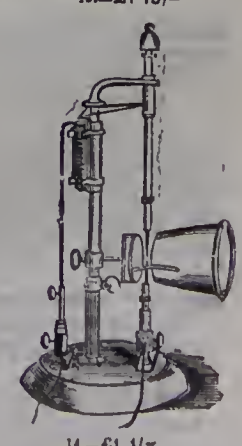
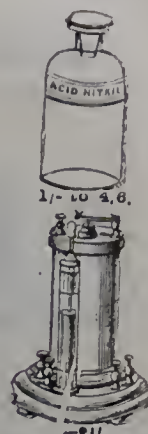
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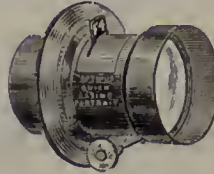
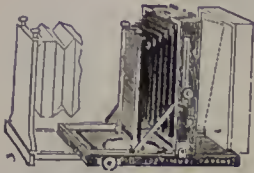


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THE LIQUOR CARNIS CO., LIM.

## THE LANCET,

A Journal of British & Foreign Medicine, Surgery, Obstetrics, Physiology,  
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LONDON,

SATURDAY,

APRIL 4TH, 1891.

THE LANCET, April 4th, 1891, says:—

"We have already had occasion to examine this excellent preparation. Liquor Carnis is now flavoured with a 'dash' of celery which gives it a very pleasant taste. That this in no way interferes with the admirable condition in which the meat juice is preserved in the Cold is evident from the fact that the simple experiment of boiling resulted in the coagulation of the fluid."

THE LANCET, July 12th, 1890, says:—

"This is evidently a meat extract prepared in the cold and preserved by glycerine. It is extremely rich in nitrogen, and the ash contains phosphates in considerable quantity. So well are the soluble albuminoids of the meat preserved that the fluid when heated turns into a semi-solid jelly. It is a really valuable nutrient."



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Please send at once some Caffyn's Liquor Carnis and Preparations for <sup>personal use</sup> <sup>or</sup> my medical friends (List herewith)  
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N.B.—THIS FORM REACHING US PROPERLY FILLED UP WILL BE DEALT WITH AS A CABLEGRAM.

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Advertisements in this department must be paid for in advance. From this rule no deviation can be made. Insertions are charged at the rate of 1d. per word, provided the advertiser attaches his name and address, for each word of which he must also pay at the same rate; or if he pays 1d. per word, his name and address will be registered and a figure attached to his advertisement. All correspondence referring to that figure must be addressed to "The Publisher of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C." and the figure must be distinctly endorsed upon the envelope. Letters will then be forwarded to their proper destination. A price is counted as one word, as e.g., £1 10s. 6d.

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Reliable recipes, ss sold over 10 years, warranted practicable and pay well; lists free. Tom Brooks, Chemist, Hornsey, London, N.

### Educational.

Allen's "Commercial Organic Analysis," 2nd volume (Fixed Oils, &c.), published by Cburchill. 171/20.

Materia Medica cabinet, 184 specimens, mahogany case by Evans, cost three guineas, price thirty shillings. "Phenacetin," 140 London Road, Nottingham.

Bentley's "Botany," 7s.; Ganot's "Philosophy," 4s.; Ganot's "Physics," 7s.; Martindale's "Pharmacopoeia" (1885), 2s. 6d.; Pereira's "Materia Medica" (3 vols.), 12s. 6d. Vincent, 69 Trigon Road, S.W.

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Dobson's black leg drinks; 6 at 5s. 6d., 12 at 3s.; offers wanted. Forster, Dover.

gross 6d perfumes, boxed, 2s. 8d. doz., assorted; clean; sample 4 stamps. 169/31.

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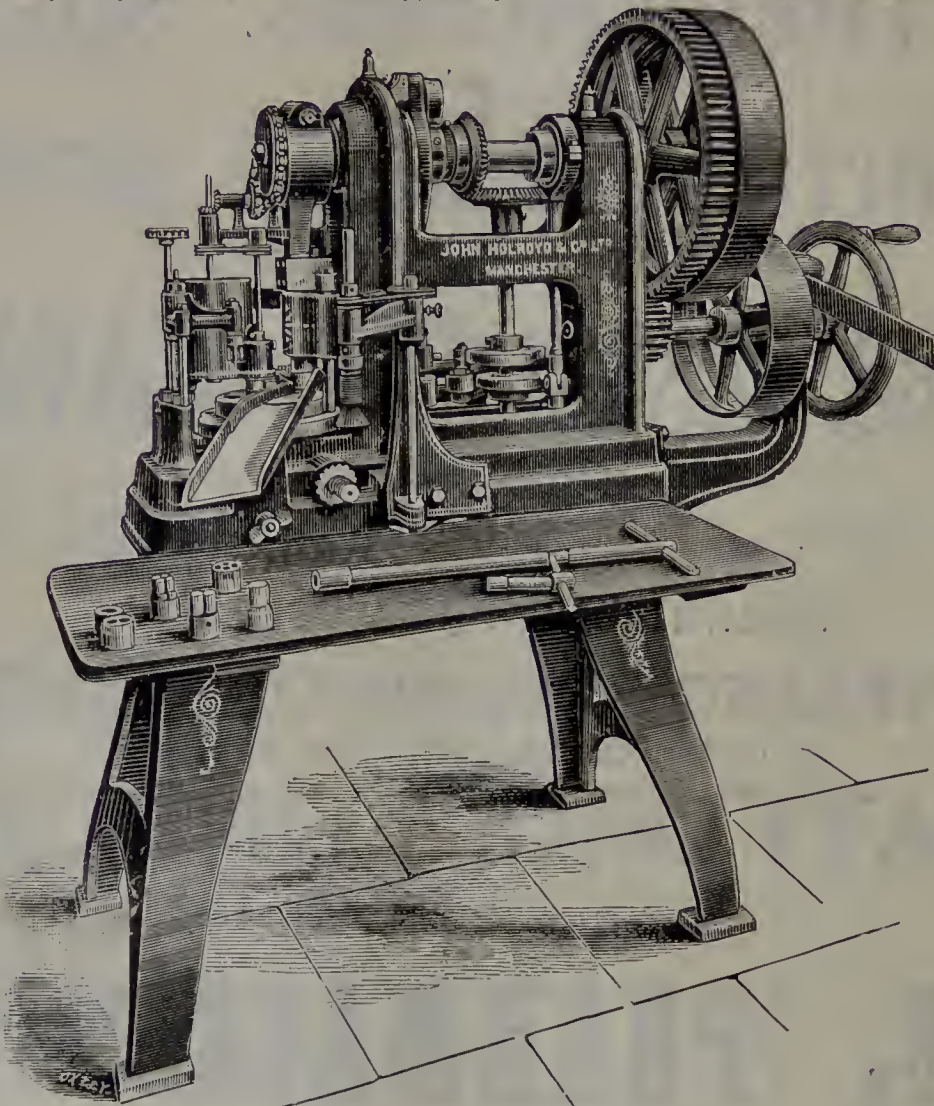
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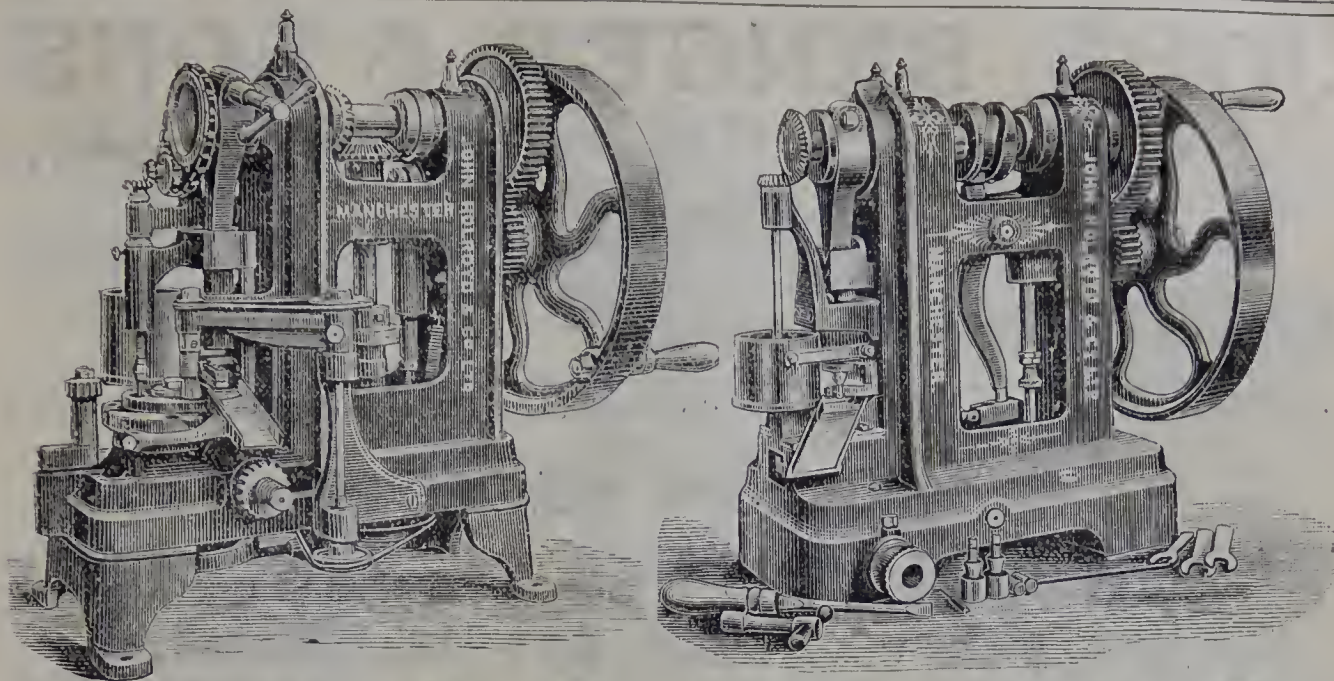
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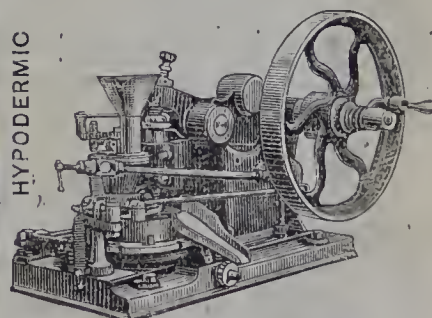
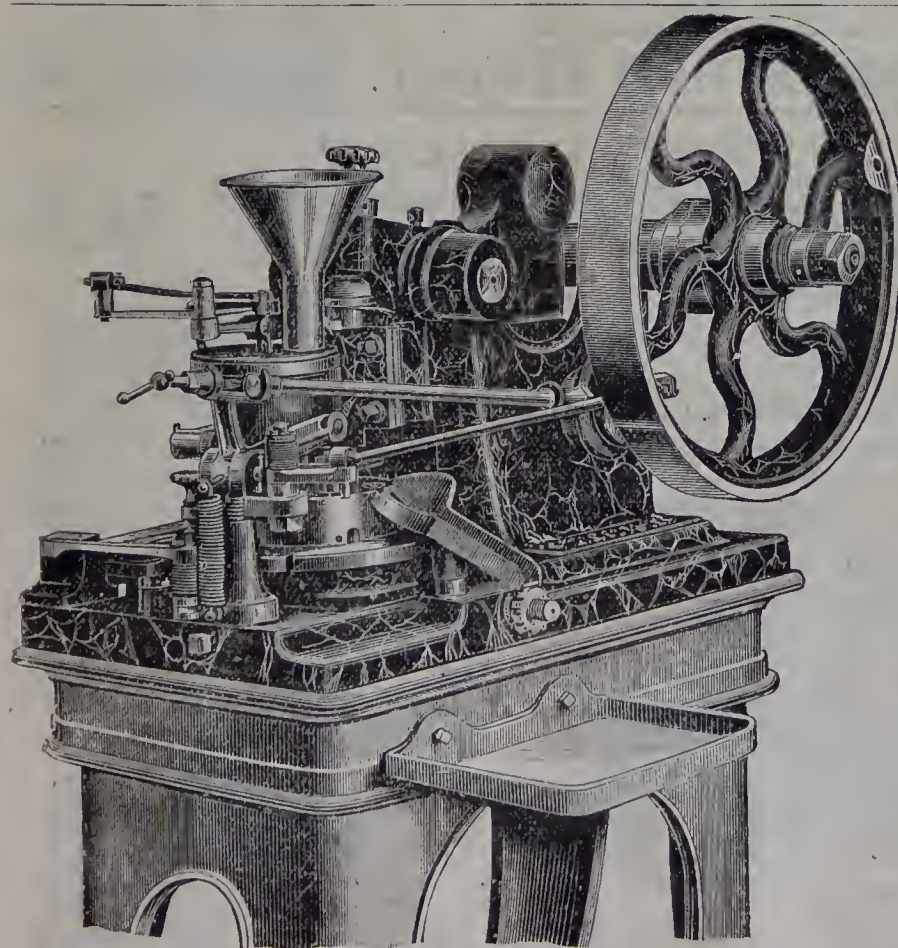


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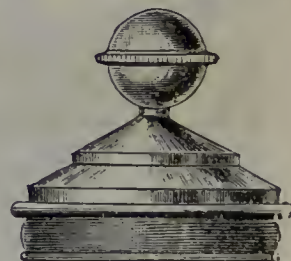
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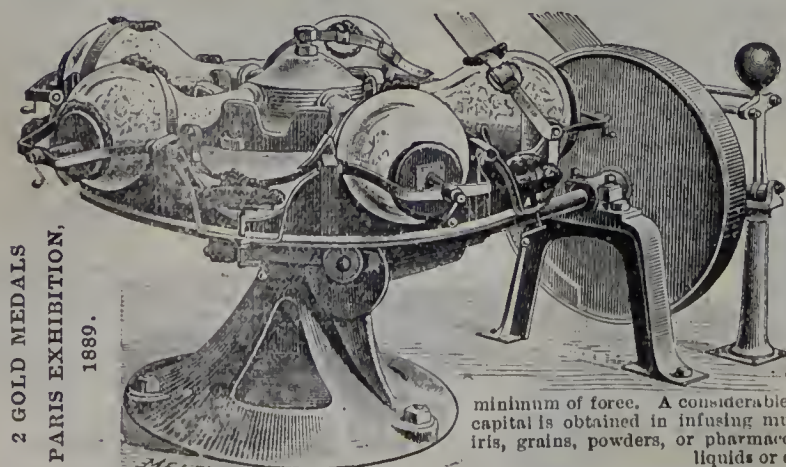
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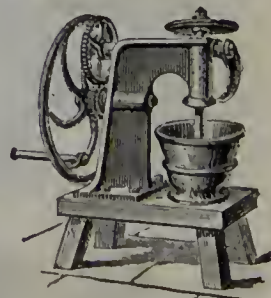
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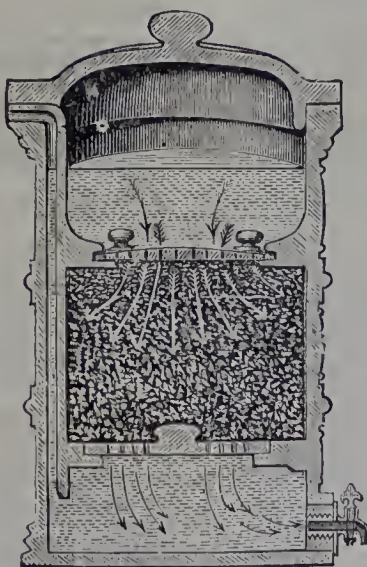
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FILTERS for the Dining-room, the Hall or Conservatory, the Kitchen and Scullery, and the Bedroom; for Travellers and Emigrants, Ships' Cabins, Yachts and Steamers; for Brewers, Distillers, Soda-water Manufacturers, Hospitals, Public Institutions, Schools, Mansions, and wherever Pure Water is required.

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All Drug Houses will supply at 2/ per dozen, in subdivided boxes.



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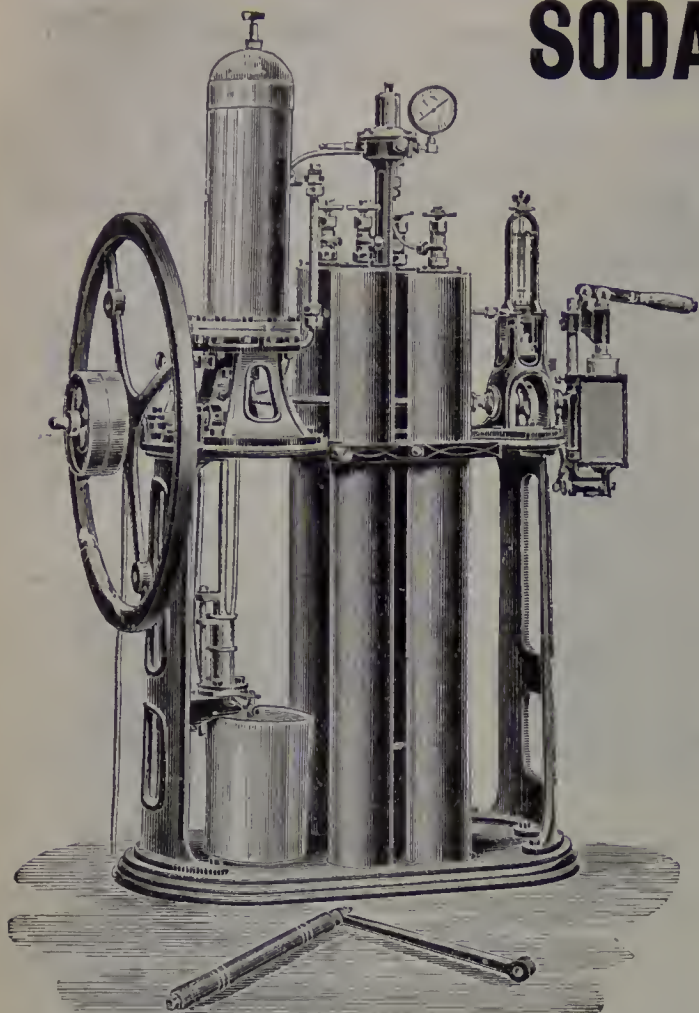
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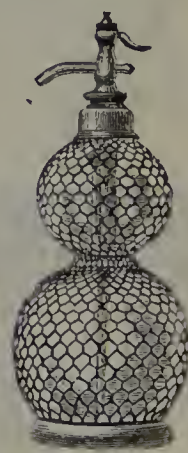
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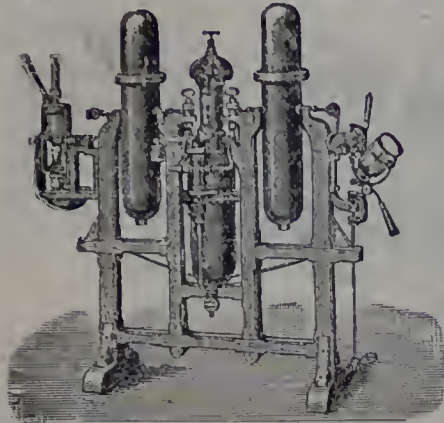
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*Produces the Purest Aërated Water made.*

Machines, in two sizes, at 25 guineas and 30 guineas. All complete. With the smaller a lad can make easily in ten hours twenty dozen Syphons or 100 dozen Bottles; with the larger, thirty dozen Syphons or 175 dozen bottles.

**INDIA.—Machines on view at Messrs. Bertie-Smith & Co.'s, Bombay.**

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J. CAMPBELL BROWN, D.Sc.

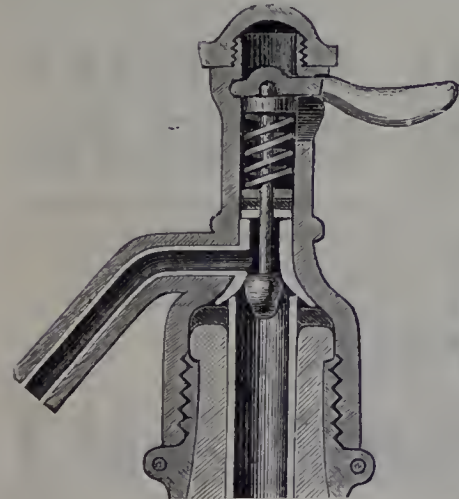
CHEMICAL LABORATORY, 20 ALBERT GATE, MANCHESTER, 21st August, 1889.

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The Aërated Waters produced have been sampled by a number of gentlemen, and pronounced by them to be of a most excellent quality.—Wishing you every success, I remain, yours truly.

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**IMPORTANT INVENTION IN SYPHONS.**

NEW PATENT GLASS-LINED (THROUGHOUT)

**SYPHON HEAD**

PATENTED FOR ENGLAND AND ABROAD.

Absolutely ensuring no metallic contamination or poisoning of the drinks.

**THIS PATENT GLASS-LINED SYPHON possesses the following advantages over others:—**

Perfect purity of Waters.

Glass Lining throughout, so is always quite clean.

Valve working on glass and in a glass tube prevents any drip from tap.

Free and fuller flow from tap.

Stronger in every part, as exterior of Syphon Head is of metal, and in appearance like ordinary Syphons, and stand wear and tear three times as long.

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Tested before being sent out to bear a pressure of 260 lbs. to the square inch.

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Patent Glass-Lined Syphon Head put to ordinary syphons for 20s. per dozen.

Sample Syphon sent carriage paid on receipt of 2s. 6d.

Seltzogene from 7s. 9d. each, 3-pint size.

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SPECIALLY PREPARED FOR A FIRST-CLASS FAMILY TRADE.

Chemists who have not hitherto sold these Waters are solicited to apply for Prices and Terms.

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*JEWSBURY & BROWN Pay Carriage on Waters and Returned  
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Are imported in bottles, and used in the treatment of CHRONIC GASTRIC CATARRH, HYPEREMIA of the LIVER, GALLSTONES, CHRONIC CONSTIPATION, DIABETES, RENAL CALCULI, GOUT, and DISEASES of the SPLEEN.

**NATURAL  
CARLSBAD SPRUDEL-SALT**

In small and frequent doses it is an efficient *diuretic*, but as an *aperient* it should be taken *before breakfast*, in doses of from 1 to 2 teaspoonfuls, dissolved in water, preferably warm. To increase the *aperient* action of the Natural Carlsbad Mineral Water, a teaspoonful of the Salt, previously dissolved in a little hot water, should be added.

SOLE IMPORTERS—

[1]

**INGRAM & ROYLE**

London: 52 Farringdon St., E.C. Liverpool: 19 South John St.  
(AND OF ALL CHEMISTS).

Price List of all Natural Mineral Waters on application.



TELEPHONE, No. 7522

TELEGRAPHIC ADDRESS—"IDRIS KENTISH TOWN."

# IDRIS & CO.

The Largest Syphon Fillers in the United Kingdom.

**SODA.** Brilliant, Pungent, and Sparkling.

**POTASH.** Prepared according to the British Pharmacopœia.

**SELTZER.** Pure and Delicious Table Water.

**LITHIA** of guaranteed strength.

**LEMONADE.** Pure fruity flavour of ripe Lemons.

**PURITY.** Water filtered by a special process, by which absolute purity is guaranteed. Distilled water used as required. Pure Chemicals only employed. All Goods are regularly subjected to strict analysis.

**ELEGANT SYPHONS.** Best Block Tin or Silver-plated Tops. IDRIS & Co. make their own Syphons, and can therefore guarantee freedom from deleterious metal.

**LOWEST PRICES** for Water, both in Syphons and Bottles. Write for Price List.

**PROMPT DELIVERY** by our Vans in London and Suburbs. Customers called on regularly once or twice a week. Country orders despatched same day as received.

IDRIS & CO. now supply a larger number of the London Hospitals, Public Institutions, and Chemists, than any other Manufacturers, which is in itself a sufficient guarantee of the excellence and purity of the Waters supplied by them.

"I have examined the Mineral Waters prepared by IDRIS & CO., and find that in regard to Chemical purity and brilliancy, they are unsurpassable."

JAMES EDMUNDS, M.D., M.R.C.P. Lond., &c.

*Medical Officer of Health and Public Analyst to St. James's, London.*

# IDRIS & COMPANY,

KENTISH TOWN, LONDON. N.W.



# SYPHONS & SELTZOGENES



## SODAWATER MACHINERY

AND APPLIANCES  
**BRATBY & HINCHLIFFE LTD**

ANCOATS 146 MINORIES  
**MANCHESTER & LONDON EC**

81 ROBERTSON STREET, GLASGOW.

All our Seltzogenes are manufactured on the well-known "Fevre" System, and each one is thoroughly tested before leaving our works.



### PRICES.

SYPHONS ... 1/6 1/8 and 1/10 each.

### SELTZOGENES.

1	2	3	4	5	8 pint.
5/6	6/2	7/	8/	9/11	15/6 each.



## PASCALL'S GOLDEN MALTEX

PATENTED.

Contains 25 % of Allen & Hanburys' Extract of Malt.

**A NOVEL CONFECTION.**

*Delicious Flavour. Brilliant & Attractive Appearance.*

**SELLS AT SIGHT.**

*Vide Dr. Tanner's Report, and The Chemist and Druggist, April 20th.*

1/- Bottles, 9/- per dozen; 1-lb. Bottles, 18/- per dozen, and in 2-lb. and 4-lb. Bottles, 1/4 per lb.

**HANDBILLS POST FREE ON APPLICATION.**

OF ALL WHOLESALE HOUSES, OR OF THE MANUFACTURER,

**JAS. PASCALL, BLACKFRIARS ROAD, LONDON, S.E.**

## CHAS. SOUTHWELL & CO.

SOLE MAKERS OF THE

## EXCELSIOR TABLE JELLIES

In Packets of  
half-pint, pint, and  
quart, costing  
less than one-third  
of the ordinary  
Bottled Jellies.



BLACK CURRANT  
ORANGE  
LEMON  
CALFSFOOT  
VANILLA  
NOYEAU  
CHERRY  
STRAWBERRY  
RASPBERRY  
PINE APPLE

PRICE LIST ON APPLICATION.

## CHAS. SOUTHWELL & CO.

WHOLESALE AND EXPORT CONFECTIONERS,

**DOCKHEAD, LONDON, S.E.**

## CHEMISTS' TEA AGENCY.

**WALKER & DALRYMPLE'S TEAS.**

REDUCED IN PRICE 2d. per lb.

### WALKER & DALRYMPLE'S

BROKEN-LEAF TEA, 1s. 6d. per lb.

**A MONEY SAVING TEA. ABSOLUTELY PURE.**

The small leaf from some of the finest India and China Teas. Produces Tea in the cup, stronger, richer, and cheaper than most whole-leaf Teas. Agents appointed, where unrepresented, throughout the United Kingdom.

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INTERMEDIATE TEA, 1s. 10d. per lb.

BEST at the PRICE EVER SOLD. Great strength, and a most useful Tea where there is a large consumption. Recommended to all who wish to SAVE in their Tea. Agents appointed where unrepresented throughout the United Kingdom.

### WALKER & DALRYMPLE'S TEAS.—

AGENTS APPOINTED, where unrepresented, throughout the United Kingdom. Prospectus and Samples Free on Application.

Warehouses, 154, 155, 159, and 160 WHITECHAPEL ROAD, and 2, 4, 6, 8, 10, 11, and 12 BRADY STREET, LONDON.

P.O.O. payable at head office. Bankers, National Provincial Bank of England



TRADE MARK.



*THE LANCET*:—"About one-third of the whole dry matter consists of true peptone, and another third of albumose. A variety of albumen uncoagulated by heat."—July 12th, 1890.

*VIENNA POLIKLINIK*:—"Your preparations . . . have proved excellent means of nutrition, and for strengthening individuals of great weakness and poverty of blood."—Prof. SCHNITZLER, Sept. 19th, 1890.

# DENAAYER'S

## LIQUID STERILISED PEPTONE OF MEAT.

Considerably more nutritive than beef, and more palatable than home-made beef-tea; elegant in appearance. No digestive function need, or can, be exercised, all having been fitted for immediate absorption. Life can be supported indefinitely upon it, and it does not clog upon the most fastidious and delicate palate. It contains all the stimulative extractives and the mineral salts in due proportion, as they exist in beef. 2s. per bottle, ready for use.

**LIQUID PEPTONATE OF IRON** (Denaeyer), 1s. 6d. per bottle, guaranteed to contain 10 per cent. of the salt in solution, equal to 330 per cent. of the metal.

**PULVIS FERRI PEPTONATIS** (Denaeyer), 4s. per ounce bottle, a beautiful reddish-grey powder soluble in water, compatible with all alkaline or neutral medicines.

**TRUE PEPTONATE OF IRON** is the produce of our laboratory alone, and is our discovery. The salt is precipitated from its solution in presence of the acid gastric juice, redissolved and absorbed with great rapidity in the alkaline medium met with in the duodenum, so that it does not interfere with digestion, and it is not chemically altered by the juices of the alimentary canal. Should be administered before meals, and its flavour requires no disguise.

PAMPHLETS AND SAMPLES FREE TO MEDICAL MEN.

Wholesale General Agents—Edinburgh: DUNCAN, FLOCKHART & CO. Glasgow: OLD APOTHECARIES' COMPANY (Limited).  
Dublin: HAMILTON, LONG & COMPANY (Limited).

**DENAAYER'S PEPTONIDS AND EXTRACT OF MEAT COMPANY (LIMITED)**  
118 BISHOPSGATE STREET WITHIN, LONDON, E.C.

# BOVRIL

The following is taken from a Clinical Lecture, given the Hotel Dieu Hospital, by Dr. J. M. BEAUSÉLIEL, Professor of Histology at the School of Medicine and Surgery:

"Undoubtedly many persons have been starved to death through inexperienced Medical Men and Nurses placing an undue nutritious value on such preparations as Extract of Meat, home-made beef-tea &c.; whereas,

had BOVRIL been used in their stead, the patients would, in nine cases out of ten, have gained strength to battle against the disease under which they were suffering.

I have no hesitation to advise you to prescribe to your patients; to your convalescents, to those of your clients who have mental exertions, to use JOHNSTON'S BOVRIL, which, in a concentrated form, contains a substantial tonic and a palatable food.

"J. M. BEAUSÉLIEL, M.D."

OFFICES:—30 FARRINGTON STREET, LONDON.

To H.R.H. The Prince of Wales, The Empress of Germany, &c.

**BRAND & CO.'S**  
**PEPTONES**  
OF  
**BEEF,**  
**MUTTON,**  
**VEAL,**  
AND  
**CHICKEN.**

**BRAND & CO'S.**  
**SPECIALTIES FOR INVALIDS.**  
CONCENTRATED BEEF TEA, VEAL, MUTTON & CHICKEN BROTHS;  
TURTLE SOUP & JELLY, CALVES' FOOT JELLY, MEAT LOZENGES  
SOLE ADDRESS, 11 LITTLE STANHOPE STREET, MAYFAIR, W.  
ESSENCES OF BEEF, MUTTON, VEAL AND CHICKEN



EIGHT PRIZE MEDALS AWARDED

**GOODALL'S  
HOUSEHOLD  
SPECIALITIES.****YORKSHIRE RELISH.**

Most Delicious Sauce in the World. Bottles, 6d., 1s., and 2s. each.

**GOODALL'S BAKING POWDER.**

The Best in the World. 1d. Packets; 6d., 1s., 2s. and 5s. Tins.

**GOODALL'S EGG POWDER.**

One 6d. Tin is equal to 25 eggs. In 1d. Packets; 6d., 1s., 2s. and 5s. Tins.

**GOODALL'S CUSTARD POWDER.**

Delicious Custards without Eggs. In Boxes, 2s., 6d., and 1s. each.

**GOODALL'S BLANCMANGE POWDER**

Delicious Blancmange in a Few Minutes. Boxes, 6d. and 1s. each.

**GOODALL'S QUININE WINE, B.P.**

Best Tonic yet Introduced. Bottles, 6d., 1s. and 2s. each.

**GOODALL'S GINGER-BEER POWDER.**

Makes the Best Ginger-Beer. Packets, 3d. and 6d.

**GOODALL'S BRUNSWICK BLACK.**

For Painting Stoves, Grates, Iron, Tin, &amp;c. 6d. and 1s. Bottles.

**GOODALL'S LAVENDER WATER.**

A Rich and Lasting Perfume. Bottles, 1s., 2s., and 5s. each.

**GOODALL'S PLATE POWDER.**

For Polishing and Cleaning all Metals. Boxes, 6d., 1s. and 2s.

**GOODALL'S JELLY SQUARES.**Make a Delicious and Nutritious Jelly. In  $\frac{1}{2}$ -pint, 1-pint, and Quart boxes, 3d., 6d., and 1s. each.

PROPRIETORS—GOODALL, BACKHOUSE &amp; CO., LEEDS

**PATENT MEDICINES  
AND  
DRUGGISTS' SUNDRIES.**

Monthly Price List of Patent Medicines, Druggists' Sundries, &amp;c., will be sent post free on application to

**GOODALL, BACKHOUSE & CO., LEEDS.****TO THE  
CHEMISTS & DRUGGISTS  
OF  
GREAT BRITAIN.**

TELEGRAPHIC ADDRESS:

COLEMAN,

GEORGE'S, NORWICH.

St. George's, Middle St.

NORWICH,

December, 1887.

The Excise Authorities having created a difficulty as to the sale of Medicated Wine containing a certain percentage of alcohol, we obtained in January last, from the Inland Revenue Authorities, permission to sell our WINCARNIS,\* or Liebig's Extract of Meat and Malt Wine, **WITH QUININE**, without a Wine Licence, and many Chemists not holding a Wine Licence have sold considerable quantities. In order further to meet the requirements of the trade, we have introduced a Liebig's Extract of Meat and Malt Wine, **NON-Alcoholic**, made from the juice of the Grape, Liebig's Extract of Meat, and Extract of Malt. This also can be **SOLD WITHOUT A WINE LICENCE**. Your orders will oblige either direct or through the Wholesale Houses.

Yours obediently,

**COLEMAN & CO., LIMITED.**

*N.B.—The Wine is sold in Bottles, 2/9 and 4/6 each.  
Trade prices on application.*

P.S.—Where the Magistrate's Certificate is not held we are willing to pay the entire cost of a Retail Certificate (the holder of which can sell any kind of Wines) if an assorted order of 6 dozen is sent us of any of our preparations. List on application. Our WINCARNIS,\* or Liebig's Extract of Meat and Malt Wine **WITHOUT QUININE** commands a very large sale, and is recommended by over two thousand medical men who have sent us testimonials in its favour.

SOLE MANUFACTURERS—

**COLEMAN & CO., LIMITED,**  
ST. GEORGE'S, NORWICH,  
AND 3 NEW LONDON STREET, LONDON, E.C.

\* WINCARNIS is a NEW NAME, registered to prevent fraudulent imitations.



60 AERATED WATER MANUFACTURERS

# HAY'S

## SOLUBLE ESSENCES

ARE GUARANTEED TO BE THE FINEST IN THE MARKET

### GINGER. HOP. LEMON & Co & Co

W. HAY, MANUFACTURING CHEMIST

# HULL

IN ORDERING SPECIFY HAY'S MANUFACTURE

## A WONDERFUL SUCCESS!!

### NON-INTOXICATING BEER

Made from MASON'S Original

## EXTRACT of HERBS

(REGISTERED.)

Composed of Yarrow, Dandelion, Comfrey, & Horehound.  
ENLARGEMENT OF SIZE.

A Sixpenny Bottle makes EIGHT GALLONS of  
**HERB OR BOTANIC BEER**

A NON-INTOXICATING BEVERAGE  
Full of Body and Flavour, with a Creamy Head like Bottled Ale, the most  
perfect substitute for Alcoholic Drinks ever discovered, for either  
Summer or Winter.

**BEWARE** of mean and fraudulent imitations.

**BEWARE** of others copying our title.

MASON'S is the original and only genuine.

MASON'S is a Special Compound entirely from Herbs

NO OTHER EXTRACT MAKES BEER LIKE IT.

Sold in Bottles at 6d., 1/, & 2/ each, with directions.

## MASON'S WINE ESSENCES

Make Temperance Wines in a few minutes.

Ginger, Orange, Lemon, Raspberry, Black Currant, &c.

These are having a very large sale now, and are extensively advertised.

Sold in Bottles at 6d., 1s., and 2s. each.

Quotations on application.

SOLE INVENTORS & MANUFACTURERS: **NEWBALL & MASON,**  
Manufacturing Chemists and Botanic Druggists, NOTTINGHAM.

# CHEMISTS

CAN SAVE

## TIME

AND

## MONEY

by selling my "Plain Label" Lines, and should remit price quoted for a sample  $\frac{1}{4}$ -gross, sent carriage paid, on first occasion; and if not satisfactory, I will also pay carriage back and return the cash.

Yours faithfully,

PETER TYRER.

### PENNY MENTHOLS

On  $\frac{1}{4}$ -gross Cards, at 5/6 and 6/6.

### PENNY (TASTELESS) PILLS

6 in a box,  $\frac{1}{4}$ -gross Cards, at 4/6.

### SPECIAL NEW LINE.

### PENNY (TASTELESS) PILLS, 6 PILLS IN GLASS TUBES.

On  $\frac{1}{4}$ -gross Cards, at 5/6.

### PENNY PERFUMES.

GLASS TUBES.

On  $\frac{1}{4}$ -gross Cards, at 6/6.

### PENNY TOOTH TINCT.

With Wool complete. On  $\frac{1}{4}$ -gross Cards, at 5/6.

### PENNY CORN SOLVENT

On  $\frac{1}{4}$ -gross Cards, at 5/6.

### PENNY COURT PLASTER.

On  $\frac{1}{4}$ -gross Cards, at 4/.

For sums under £1 please remit Postal Order,  
not Cheque, and oblige,

## PETER TYRER,

70 Long Lane, LONDON, S.E.



# CONCENTRATED PEPTONISED COCOA & MILK AND CONCENTRATED PEPTONISED MILK (PATENT).

These two preparations are made with pure rich PRE-DIGESTED Country Milk, and, by mere dilution with hot water, afford a delicious restorative beverage the assimilation of which requires no digestive effort.

## SAVORY & MOORE LONDON.

Tins 1s. 6d. and 2s. 6d. Obtainable Everywhere.

### ROWNTREE'S

The "MEDICAL PRESS AND CIRCULAR":—

"Certainly this preparation is of delicate flavour . . . It is perfectly soluble . . . the small quantity required for the immediate production of a cup of excellent cocoa will ensure for this 'Elect Extract' a favourable reception at the hands of persons of weak digestion, and all who prefer this wholesome beverage to tea and coffee."



The "BRITISH MEDICAL JOURNAL" says:—

"Rowntree's Cocoa Extract is one of the best. Its flavour and aroma are good. Cocoa thus prepared is one of the most digestible articles of food."

YORK, ENGLAND

### ROBINSON'S LIEBIG'S BEEF WINE.

Composed of Liebig's Extract of Beef, Extract of Malt, and sound Port Wine.

#### REPORT ON BEEF WINES.

From the results of my Analyses of various Beef Wines I have had occasion to examine, none have equalled as regards strength, purity of ingredients, and (of no less importance) the skilful and judicious manner in which the respective ingredients have been proportioned and combined, the Liebig's Beef Wine manufactured by Mr. B. Robinson, of Pendleton, Manchester.

It is in every sense a reliable preparation, embodying in a pleasing and palatable form all the acknowledged medicinal and nutritive properties pertaining to Liebig's Extract of Meat, Extract of Malt, and sound Port Wine.

WILLIAM ELBORNE, F.C.S., F.L.S.,

Lecturer on Materia Medica in the Owens College, Manchester (Victoria University).

December 15, 1888.



Introduced 1855.]

### ROBINSON'S CONCENTRATED WATERS.

[Introduced 1865.]

One Ounce of these Waters added to Forty Ounces of Distilled Water forms a clear Medicated Water (without filtering), similar in every respect to those prepared according to the directions of the British Pharmacopoeia, and free from all Chemical impurity. They will keep good any length of time in any climate.

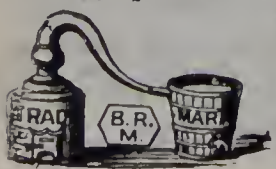
Aqua Anethi, Concent., 4/ lb.	Aqua Cinnam. Ver. Concent., 6/ lb.	Aqua Fœniculi, Concent., 4/ lb.	Aqua Pimentæ, Concent., 4/ lb.
" Anisi " 4/ "	" Cacao " 4/ "	" Ment. Pip. " 4/ "	" Rose " 8/ "
" Camphoræ " 4/ "	" Flor. Aurant. " 8/6 "	" Ang. " 6/ "	" Rose Virgin " 10/6 "
" Carui " 4/ "	" Flor. Sambuci " 8/6 "	" Virid. " 4/ "	

The above are put up in Bottles of 4 lb. or 1 lb. and upwards, each of which has the Inventor's Protection Label over Cork.

From the LANCET, July 15, 1882:—"CONCENTRATED WATERS (Robinson's, Pendleton, Manchester).—Among the samples sent to us we find Aq. Anethi, Anisi, Cinnam. Ver., Rose, and some dozen of others. Diluted with forty parts of water they form the ordinary waters of the Pharmacopoeia. They are excellent in quality, and will be very useful, especially in country practice. [1]

Wholesale HARRISON & Co., London, and most Provincial Wholesale Druggists. SPARED BY THE INVENTOR.

B. ROBINSON, MANUFACTURING CHEMIST, DISTILLER, AND BREWER OF BRITISH WINES, MANCHESTER.





# S. G. CLEMENTS & CO.

(Established 1812.)

BRISTOL ANNATTO WORKS.

(Established 1812.)

**LIQUID EXTRACT ANNATTO.**

A very bright, clear, and strong solution.

**ANNATTO IN CAKE.**

Giving, when dissolved, a deep Orange Stain with minimum of sediment.

**OIL BUTTER-COLOURING.**

Unsurpassed in richness of tint, and unobjectionable in taste or odour.

**PRIME RENNET**

Has each season an increasing sale.

**RENNET POWDER (FOR JUNKETS, &c.).**

In handsome Tins, 6d., 1/-, 1/6.

**PRIME RENNET**

Produces the Maximum of Curd.

SPECIAL PRICES TO BUYERS IN BULK.

Grinders of all kinds of Drugs and Spices for Cattle Powders, &amp;c.

**DRUG & SPICE MILLS.**

12, 13 &amp; 14 LEWIN'S MEAD, BRISTOL.

## WM. NICHOLLS & CO.

ORIGINAL INVENTORS OF

# FLUID EXTRACT OF ANNATTO

INDISPENSABLE TO THE DAIRY FARMER.

ABSOLUTELY PURE &amp; INNOCUOUS.

Contains a Greater Amount of Pure Colour in Solution than any other make.

Leaves no Sediment.



TRADE MARK.

Used and Valued by Dairy Farmers throughout the United Kingdom, Canada, New Zealand, Australia, and the Cape; also in the United States of America, Sweden, Denmark, France, Switzerland, Italy, and Russia.

PRIZE MEDALS AWARDED.

WHOLESALE and for EXPORTATION

WM. NICHOLLS &amp; CO., Rowden Hill, Chippenham, WILTS.

SAMPLES AND PRICE LISTS FREE ON APPLICATION.

# "MYRTLE GROVE" TOBACCO

In 1-oz., 2-oz., and 4-oz. Packets, and  $\frac{1}{2}$ ,  $\frac{1}{4}$ , 1 lb. Tins only.

TADDY &amp; CO., 45 Minories, LONDON



ESTABLISHED 150 YEARS.

SNUFF, TOBACCO, AND SEGAR MANUFACTURERS.

Write for List of Specialities.

## MILLAR'S BRITISH WINES.

ORANGE (suitable for Quinine), GINGER, RAISIN COWSLIP, CHERRY, &c.  
A. MILLAR & CO., Thomas Street, DUBLIN.

Sole Agents for London and District—H. J. ROYDANT &amp; CO., 75 Acre Lane, Brixton, S.W.

# "RAMORNIE." LIEBIG'S Extract of Meat.

As supplied to the Admiralty, War, and India Offices.

1-lb. Jars..... per lb.	8/9	per doz.	81/0	2-oz. Jars..... per lb.	7/8	per doz.	11/6
1/2-lb. Jars..... "	7/0	"	42/0	1-oz. Jars..... "	8/4	"	6/8
1/4-lb. Jars..... "	7/8	"	21/9	1/2-oz. Jars..... "	8/8	"	5/8

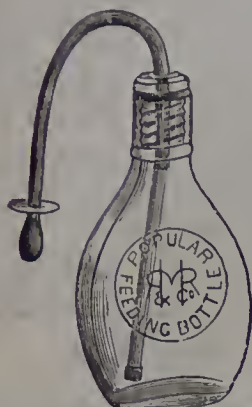
QUOTATIONS FOR EXTRACT IN "BULK" ON APPLICATION.

Write for Detailed Price List to the Australian Meat Co., 9 and 11 Fenchurch Avenue, E.O.

6 lbs. Carriage free.



# MAY. ROBERTS & CO.'S NURSERY AND NURSING REQUISITES.



**POPULAR. (6d.)**

GREEN, Screw Glass Stoppers.  
White fittings, 3/ per dozen,  
in box. Each boxed, 3/6  
per dozen.  
Black fittings, 3/3 per dozen,  
in box. Each boxed, 3/  
per dozen.  
The same in 1/ quality, 4/9  
and 5/3 per dozen.  
With Boxwood Tops, 2/4 to  
3/1 per dozen.  
White Glass Bottles, 2d. per  
dozen extra.

## FEEDING BOTTLES.

The following are a few of the approved styles regularly stocked, which are saleable and give great satisfaction to customers. They are constructed of the best materials on sound principles, and yield good profit.



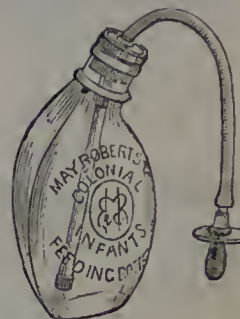
**SANDRINGHAM. (1s.)**

WHITE, Screw Glass Stoppers.  
Each in a box.  
White fittings, 5/6; Black, 6/ per dozen.



**SANDRINGHAM. (1s.)**

WHITE, Earthenware Tops.  
Each in box.  
White fittings, 5/6; Black, 6/ per dozen.



**COLONIAL. (6d.)**

GREEN, Screw Glass Stoppers.  
White fittings, 3/ per dozen,  
in box. Each boxed, 3/6  
per dozen.  
Black fittings, 3/3 per dozen,  
in box. Each boxed, 3/9  
per dozen.  
The same in 1/ quality, 4/9  
and 5/3 per dozen.  
With Boxwood Tops, 2/4 to  
3/1 per dozen.  
White Glass Bottles, 2d. per  
dozen extra.

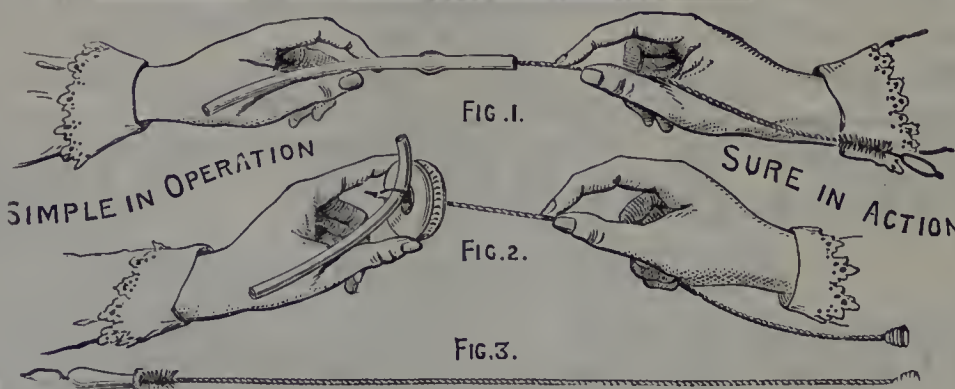
**SPLENDID VALUE!**

## THE FOLD-FASHIONED BOTTLE



is again coming into use, many doctors preferring it. We have all the shapes & supply them fitted and unfitted. Thus the kind as

shown in figure, best quality, 3 sizes, assorted, are 3/ per dozen bottles; fitted with black teat and boxwood-top cork, with brush complete, in box, 8/6 per dozen.



## PERFECT TUBE CLEANER.

There is nothing to beat this. It is perfect from the sanitary point of view. Use as shown above. Price 8/ per gross.



FIG. 1.



FIG. 2.

BREAST GLASS, as Fig 1, India-rubber and glass mounts, 12/ per dozen.

" " Fig. 2, " " 15/ "

## FITTINGS.

### INDIA-RUBBER TUBING.

White, Brown, and Black, 3d. to 4d. per yard.

### GLASS TUBES.

10d per gross.

## TEATS.



All sizes and shapes, White, Brown, and Black, put up in 1-dozen boxes.

Smallest size, White 5d., seamless 1/; Black 8d., seamless 1/ per dozen.

Other sizes in proportion.

Complete Fittings for all kinds of Bottles. Also Spare Bottles in any quantity from single bottles to original crates.



BREAST EXHAUSTER, white fittings, 5/9 per dozen; black fittings, 6/3 per dozen.

**MAY, ROBERTS & CO.**  
Wholesale Druggists' Sundriesmen

Dealers in Patent Medicines, Proprietary Articles, Perfumery,  
Mineral Waters, Lozenges, &c., &c.

**9 CLERKENWELL ROAD, LONDON, E.C.**

PRICE LIST ON APPLICATION.



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Guber Spring  
Hassall and Co.  
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Greiff, R. W., and Co.  
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Orme, J., and Co. (Scientific)  
Parkin, son and Mayment  
Shears J., and Son  
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Bock, Oscar

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Cooking and Co. (Japan)  
Felton, Grimwade and Co.  
(Melbourne)  
Fongers and Co. (New York)  
Kempthorne, Prosser & Co. N.Z.  
Lennon, B. G., and Co.  
Levy, Jules  
Peake, Allen and Co.  
Preaser, Taylor and Co.  
Roberts (Paris, Ac.)  
Rocke, Tompsett and Co. (Melbourne)  
Sharland and Co.  
Soul, W. H., and Co.

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Hewlett and Son  
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Bretby and Hinchliffe (Ld.)  
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Gibberton, H., and Sons  
Hearn, B. A., and Co.  
Isaacs and Co.  
Johnson and Jergensen  
Kilner Bros.  
Mark, J., and Co.  
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Shirley, A. W.  
Thompson, Walters, Hole and  
Toogood, W. Co. (Lim.)  
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Lewis, H. K.  
Muter, Dr.

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Evans, Sons and Co.  
Kent, G. B., and Sons  
Moseley, David, and Sons

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Owen, J., Jr.  
Parmenter, I. W. and Co. Lim.  
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Fuerst Bros.  
Howards and Sons  
Keene and Aehwall (Homoeo-  
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Fournier, Son and Co.  
Hooper, B., and Co.

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Duncan, Flockhart and Co.  
Evans, sons and Co.  
Ferris and Co.  
Moss, J., and Co.

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Maw, S., Son & Thompson  
May, Roberts and Co.  
Sanger and Son

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Whits, A., and Co.

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Greiff, R. W. and Co.

Hewland, J.

### CHLORIDE OF LIME

Government Sanitary Co.  
National Chemical Co.

### CHEMICALS

Andrae, Oscar and Co.  
Behm, F.  
Bramwell, E., and Son  
Duncan, Flockhart and Co., Lim.  
Egan, W., son and Co.  
Fletcher Fie one & Stevenson  
Fuerst Brothers  
Goodall, Backhouse and Co.  
Greiff, R. W., and Co.  
Hill, A. S., and Ben  
Hodgkinson, Treacher and  
Clarke  
Howards and Son (Pharm.)  
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Lovermore, Aug., and Co.  
Loftthouse and Saltner  
May and Baker (Limited)  
Morris and Wallace  
Moss and Co.  
Poulenc, Frères  
Reade Bros. and Co.  
Smith, T. and H., and Co.  
Stern, G. and G. (Fumigine)  
Tyrer, T., and Co.  
Washington Chemicals  
Watts, A., and son  
Ziemermann, A. and M.



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Solport, Bros.

**CHLORODYNE**Davenport (Browne's)  
Towle, A. P., and Son**CHLOROFORM, &c.**Duncan, Flockhart and Co.  
Greiff, R. W., and Co.  
Macfarlan, J. F., and Son  
Mason, A. H.  
Smith, T. and H., and Co.  
Warrington Chemical Co.  
Wright, Layman and Umney  
Zimmermann, A. and M.**CITRIC ACID**

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Howards and Sons

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French Hagerio Soc.  
Jozau, Gabriel  
Mariani and Co.**COCOA & CHOCOLATE**Cadbury Bros. Fry and Sons  
Christy and Co.  
Kowniree and Co.**COOL-LIVER OIL**Allen and Hanbury  
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Evans, Sons and Co.  
Greiff, R. W., and Co.  
Hill, A. S., and Son  
Jackson, W. and H.  
Lofoden Cod Liver Oil Co.  
Lofthouse and Saltmire  
Smith, T. J.  
Southall Bros. and Barclay  
Woolley, Sons and Co.**COFFEE**Essence)  
Symington and Co. (Joues)**COLPISABLE TUNES**Betta and Co.  
Brooks, Peel and On.  
Anders, H. G., and Son**CAMP MEDICINES**Allen and Hanbury  
Blyton, Astley and Co.  
Burroughs, Wellsome and Co.  
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Hooper, B., and Co.  
Leo and Co.  
Lloyd, T. H., and Co.  
Wyleys and Co.**CONFECTIONERY**Blyton, Astley and Co.  
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Kerfoot, T.  
Pascall, J.  
Southwell, C., and Co.  
Warwick Brothers**CONCENT. LIQS.**Evans, Sons and Co.  
Fletcher, Fletcher and Stevenson  
Lloyd, T. H., and Co.**CORN CURS**Seabury and Johnson (Plastal)  
Thompson, M. [F. Young, H.]**COTTON WOOL**Haynes, G., and Co. (Absorbent)  
Robinson and Sons (Absorbent)  
Sanger, J., and Sons  
Seabury and Johnson**CRSED LINSBED**

Mumford, S. G.

**DENTIFRICES**Eau de Botot  
Evans, Sons and Co.  
Fentiman and Co.  
Jewellery and Brown  
Lakeman, J. J. "Salvine"  
Lowe, C.  
Queich, H. C.  
"Skiving"  
Stevens, P. A.  
Sutton, C., and Co.  
"The Alexandria" (Ziemer)  
Thompson and Capper  
Warwick Bros.  
Woods, W. Arca Nnt)**DRUGGISTS' SUN.**Ayrton and Saunders  
Bailey, M., and Co.  
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Evans, Sons and Co. (Savory)  
Fordham, W. B., and Sons (Lim.)  
Gilbertson, W. B., and Sons  
Hill, A. S., and Son  
Hockin, Wilson and Co.  
Idris and Co.  
Jackeon, W. and H.  
Kay Bros. Lim.  
Lynch and Co.  
Mark, J., and Co.  
Merriott, E. and Co.  
Mason, A. Newton  
Blaw, Son, & Thompson, S.  
May, Roberts and Co.  
Queich, H. C.  
Rankin, W., and Sons  
Sanger and Sons  
Schultz and Co.  
Thompson, Walters, Hole and Co., Lim.  
Tidman and Son  
Toogood, W.  
Wood, Vincent**DRUG GRINDERS**

Jordan and Co.

**DRUMS**

Berger, F.

**DISINFECTANTS**Adams, Webster and Co.  
Fletcher Bros. and Co.  
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Grindley and Co. (Lim.)  
Hamilton and Co. (Lim.)  
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National Chemical Co.  
Santitas Co.  
Seabury and Johnson**EAU DE COLOGNE**Farina, J. M.  
Martin, Maria (Nun)  
Wood, V.**ELASTIC HOSIERY**Darton, F., and Co.  
Gent and Co.  
Lancaster, J., and Son  
Orme and Co.**ENEMAS**Evans, Sons and Co.  
Sanger and Son**ENGRAVERS**Barker, W., and Son  
Gorsan, F. R.  
Young, C. A., and Co.**ESSENCES**Reckett, W. Boehm, P.  
Berger, F.  
Brasoy and Hinchliffe (Ld.)  
Burgoyne, Burdidge and Co.  
Bush, Son, and Co.  
Bush, W. J., and Co.  
Cummock, J.  
De Carle and Son  
Firth, H.  
Goodall, Backhouse and Co.  
Hay, W. Idrie and Co.  
May and Baker. (Limited)  
Millar, A., and Co.  
Newball and Mason  
Oldfield, Pattinson and Co.  
Stevenson and Howell  
Tyrer, F. (Anchorite)  
Tyrer, T., and Co.  
Woolley, Sons and Co.**ESSENTIAL OILS**Berger, F.  
Boehm, F.  
Bush, W. J., and Co.  
Bush, W., Son and Co.  
Clay, Dod and Co.  
Cooking & Co. (Japan Pepper)  
Cummock, J.  
Drysdale, J. W., and Co.  
Evans, Sons and Co.  
Firth, H. [Clarke  
Hodgkinson, Treacher and  
Lambert, S., and Co. (Sandal)  
Wood)  
May and Baker (Limited)  
Miller, J., and G.  
Mourard, J.  
Poppelreuter, W.  
Stevenson and Howell  
Symee and Co.  
Treatt, R. C.  
Vost, G., and Co.  
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Wright, Layman and Umney**ETHER**Duncan, Flockhart and Co.  
Howards and Son  
May and Baker (Limited)  
Robbins, J., and Co.  
Tyrer, T., and Co.  
White, A., and Sons  
Woolley, Sons and Co.  
Wright, Layman and Umney**EXTRACTS, FLUID**Allen and Hanbury  
Barber, G., and Co.  
Burgoyne, Burdidge and Co.  
Dakin Brothers  
Evans, Sons and Co.  
Fletcher, Fletcher and Stevenson  
Hearon, Squire and Francis  
Hooper, B., and Co.  
Lloyd, T., Howard and Co.  
Moss and Co.  
Potter and Clarke  
Wright, Layman and Umney**EXTRACT, MEAT**Australian Meat Co.  
Bovril (Limited)  
Brand and Co.  
Dennayer's Peptone and Ex-  
tract of Meat Co. (Lim.)  
Lieble Co.  
Liquor Carnie Co. (Lim.)  
Mason, G., and Co. (Lim.)**FADING BOTTLES**Bremitt, E. and Co., Lim.  
Evans, Sons and Co.  
Hearn, E. A., and Co.  
Hockin, Wilson and Co.  
Jackson, W. and H.  
Lynch & Co.  
Marriot, E., and Co.  
May, Roberts and Co.  
Thompson, Walters, Hole and Co. (Limited)  
Toogood, W.**FLY PAPERS**Ford, Shapland and Co.  
Tunbridge and Wright  
Wilson, S.**FOOD (Infants' & Invalids')**Allen and Hanbury  
Baelz, R., and Co.  
Brand and Co.  
Goodall, Backhouse and Co.  
Hearon, Squire and Francis  
Lieble Co.  
Liquor Carnie Co. (Lim.)  
Mottershead & Co. (Benger's)  
Nastle, H. Food)  
Ridge, Dr.  
Savory and Moore**FORMULA**

Brooke, T.

**FILTERING**Fordham, W. B., & Sons, Lim.  
Silicated Carbon Filter Co.**SINGER ALA**Hay, W. (Essence)  
Mills, R. M., and Co.**GLUE**Grove Chemical Co.  
Fordham, W. B., and Sons**GLYCERINE**Boehm, F.  
Pink and Co. [Fuerst Bros  
Greiff, R. W., and Co.  
Lofoden Cod Liver Oil Co.  
Price's Canada Co.]**GRANULAR PREP.**Bishop, A., and Sons  
Blyton, Astley and Co.  
Curtis and Co.  
Hearon, Squire and Francis  
Hill, A. S., and Son  
Kerfoot, T.  
Wright, Layman and U. ney**GUM**Fink and Co. (Aranse, &c.)  
Greiff, R. W., and Co.  
Hyde, Nash and Co.  
Levermore Aug., and Co.**HAIR PREP.**Cheesebrough Mfg. Co.  
Edwards and Co.  
Truefitt, H. P. (Limited)**HERE BEER HITS**Lakin, W. H.  
Newbold and Mason  
Oldfield, Pattinson and Co.  
Potter and Clarke**HERBALISTS**Newball and Mason  
Potter and Clarke**HOMOEOPATHIS**Keene and Ashwell  
Leath and Roes  
Thompson and Capper  
Watson and Wales**HOSPITALS**

London Homoeopathic

**HYPOPHOSPHITES**Duncan, Flockhart and Co.  
Fellows  
Fletcher, Fletcher and Co.  
Symes and Co.  
Tyke and King**INHALERS**Spirone Co., The  
Toogood, W.**INSECTICIDES**Keating, T.  
Kaufman and Co.  
Steider and Co.  
Thompson, Walters, Hole and Co. (Lim.)**INK [See MARKING INKS.]**Bewley and Draper  
Duncan, Flockhart and Co.**KOLA**Christy, T., and Co.  
Thompson, M. P.  
Van Hargan, J.**KETCHUP**

Tyrer, P.

**LARD**

Ewen, J., and Sons

**LINSEED POULTICE**

Seabury and Johnson

**LINT**Liverpool Lint Co.  
Newcome, O.  
Robinson and Sons  
Seabury and Johnson**LOZENGES**Allen and Hanbury  
Blyton, Astley and Co.  
Gibson, E., and Sons (Mantel)  
Hill and Son  
Kerfoot, T.  
Pascall, J.  
Raines and Co.  
Randall and Son  
Stern, G., and G.  
Warwick Bros.**LIME JUICE**Evans, Sons and Co.  
Idrie and Co.**MACHINERY**Beyer Freres.  
Burroughs, Wellsome and Co.  
Foster, F.  
Holroyd, J., and Co. (Lim.)  
Melin, C.  
Ohlson, A.  
Palau and Co.  
Shore and Son  
Werner and Pfleiderer**MAGNESIA**Andreas, Oscar, and Co.  
Bush, W., Son and Co.  
Dinnford and Co.  
Greiff, R. W., and Co.  
Henry, T. and W. (Unilized)  
Hill and Sons, A. S.  
Kerfoot, T. (Oitrate)  
Queich, H. C.  
Southwell, C., and Co. (Oitrate)  
Washington Chemical Co.**MALT EXTRACT, &c.**Allen and Hanbury  
Baelz, R., and Co.  
Burroughs, Wellsome and Co.  
(Kepler's)  
Hearon, Squire and Francis  
Oppenheimer Bros. and Co.  
Rode Bros. and Co. (Biscuits)  
Wyleys and Co.**MANICURE**Carmichael, M. W.  
Dr. Paul's**MARKING INKS**Barber, G., and Co. (Orimeon)  
Hickson, J.  
Marx, M. and E.**MEDICINE CHESTS**Day, Son and Hewitt (Veteri-  
nary)  
Day and Sons (Veterinary)**MENTHOL**Al Menthol Depot, A. W.  
Shirley, Proprietor  
Cooking and Co.  
Evans, Sons and Co.  
Hockin, Wilson and Co.  
Seabury and Johnson  
Thompson, Walters, Hole and Co. (Lim.)  
Tyrer, F.**MERCURIALS**Fuerst Brothers  
Howards and Son  
May and Baker (Limited)**METHYLATES****SPIRITS**Boord and Son  
Burrough, J.  
Harvey, J. and W., and Co.  
Jones and Co.  
Phillips, G., and Co.  
Smith, S., and Co.**METHYLENE**

Robbins, J., and Co.

**MICROSCOPES**Darton, F., and Co.  
Perken, Son and Rayment**MILK**Anglo-Swiss Condensed Milk  
Co.

Nestle, H. (Condensed)

**MIXING****MACHINERY**Gardner, W.  
Werner and Pfleiderer**MORPHIA**Macfarlan, J. F., and Co.  
Smith, T. and H.**OILS, PAINTS, &c.**Hugh Highgate and Co.  
Fox, W., and Sons**ointment BASES**Burroughs, Wellsome and Co.  
Cheesebrough (Vaseline)  
Grindley and Co. (Petroleum  
Jelly)Richardson, W. H.  
Rode Bros. and Co.**OPTICIAN'S**Botwright and Grey  
Darton, F., and Co.  
Lancaster and Sons  
Perken, Son and Rayment  
Raphael and Co.**OTTO OF ROSE**Firth, H.  
Fuerst Bros.  
Moryoseph, A.  
Treatt, R. C.**PAPAIN FINKLER**

Kuhn, B.

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Fletcher, Fletcher and Stevenson  
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Hearon, Squire and Francis  
Hewitt and Co.  
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Hooper, B., and Son  
Howards and Sons  
Jeyes Sanitary Compounds Co.  
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Perken, Son and Rayment  
Tyrer, T., and Co.  
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Holloway's Hooper's  
Jackson, W. and H.  
Lloyd, T., Howard and Co.  
McKesson and Robbins  
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Robinson's  
Wand, S.  
Warner, W. B. and Co. (Coated)  
Wyleys and Co.**PATENT AGENTS**Horn and Son  
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Howards and Sons  
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Have been known to the trade for many years past, and their steadily increased sale is the best proof of the appreciation in which they are held. Notwithstanding that the prices of some brands of perfumes have been reduced, **F. NEWBERRY & SONS** find it both impossible and needless to offer any other advantages to buyers than—(1) the excellent quality of the Perfumes themselves, (2) their price. The object kept in view is not to produce goods which may be sold at a given price and leave a given margin of profit, but to produce such as shall equal or surpass a given standard of quality.

## BERDOE'S TRIPLE

IN PLAIN STOCK BOTTLES of 20 oz., 10 oz., and 5 oz.

		£	s.	d.
Ess. Bouquet	.. .. .			
Frangipane	.. .. .			
Jasmin	.. .. .			
Jockey Club	.. .. .			
Millefleurs	.. .. .			
New Mown Hay	.. .. .			
Opoponax	.. .. .			
Patchouli	.. .. .			
Rondeletia	.. .. .			
Stephanotis	.. .. .			
Ylang Ylang	.. .. .			
	per 20 oz.,	0	8	7
	per 10 oz.,	0	4	4
	per 5 oz.,	0	2	3

The above are the leading Essences, and to these the special attention of customers is asked. Those who desire greater variety will find in "Newberry's Catalogue" a more extended list.



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Violets	.. .. .			
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Eau de Cologne	.. .. .			
Lavender Water	.. .. .			
	per 20 oz.,	0	4	4
	" 10 "	0	2	3
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Berdoo's Perfumes, in Handsome Show Bottles for the Counter, Rose Cut Stoppers, Vitrified Opal Solid Labels with Gold Border and Black Letters, from 11s. 6d. each.

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THE "WINGED LION"

## Flower & Vegetable Seeds

In 1d. Pictorial Packets, assorted to order,  
6s. per gross, on  $\frac{1}{2}$  gross cards or n 2 gross  
Special Counter Show Cases, with gold  
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TRADE MARK.

With all orders for 6 gross and upwards we send free a large Descriptive Plate, Printed in Colours, varnished and mounted on rollers. This new and beautiful Show Card comprises representations of 50 select varieties, and is a handsome and artistic advertisement. We charge this plate 1s. each when required with orders less than 6 gross.

The "Harrison" Show Case, as here represented, made of metal Japanned Black, with Bronze Lettering, to hold 30 varieties, or 2 gross in all. Price 3s. 6d. each empty.

## BIRD SEEDS IN PACKETS

(Winged Lion Brand).

Put up in cardboard cases with attractive design in colours. The seeds are carefully selected from the finest stocks, and are free from all dirt and dust.

This combination of Bird Seeds is allowed by the highest authorities to be the best obtainable for all kinds of cage birds.

### PRICE.

1d. packets	...	...	...	...	...	9s. 0d. gross.
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Packages extra—allowed for on return.

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**Real Heliotrope** ♦♦♦♦♦♦♦♦

**Flower-Flavoured Cachous.**

Real Violets, Real Roses, Real Jasmin, Real Lavender Cachous.

3/- per lb., splendidly labelled; 4/- per dozen Boxes, gold embossed on calf.

18 OLD SWAN LANE, LONDON, E.C.

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**WHITE AND SOUND TEETH.**

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## ORIENTAL TOOTH PASTE.



This old-established and increasingly favourite Dentifrice has been over Sixty Years before the Public. It is warranted to retain its properties and keep in good condition in any climate. The original and only genuine is manufactured solely by

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Wholesale  
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We positively guarantee all our best Brushes, which can be bought  
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INVENTORS, PATENTEES, AND MANUFACTURERS OF THE

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Justly Celebrated for their Superior Strength and Durability. The best Brush in the Kingdom at the Price. *Loose Hairs an impossibility.* Made in thirty-six different patterns and various stiffnesses of Hair; the grooves in the back are filled in with Silver Cement, but Red, Blue, or White Cements can be substituted if preferred.

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THE

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BIDWELL'S PATENT, No. 507.

The perfection of a Tooth Brush; reliable and economical—wearing twice the time of an ordinary made Brush. Made with Improved Unbleached White Bristles.

The bristles are carefully selected and specially prepared, and although *white* in colour are warranted *all unbleached*, and have not been subjected to the fumes of brimstone (a process all other bristles undergo), thereby ensuring elasticity, strength, and durability. The grooves in the backs are filled in with *Patent Gold Enamel*, which is imperishable, and renders the Brush watertight, and which cannot be dissolved by any liquid, or affected by extreme climates. This great improvement also makes the Brush both in substance and appearance of the highest standard quality. In other Brushes the grooves are filled in with Red Sealing Wax or other cements, that fall or wash out, or are dissolved by the various Mouth Washes now in use.

THEY RECOMMEND THEMSELVES AFTER A FEW TIMES USING.



A Brush of the usual make after a few weeks' wear.



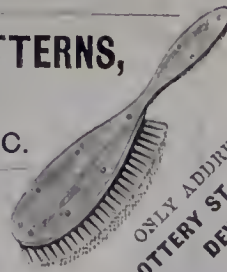
The "Sovereign" Brush after a few weeks' wear with fair usage.

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NAIL, SHAVING, FLESH, CLOTH BRUSHES, ETC.

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OTTERY ST. MARY,  
DEVON.



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THE GENUINE  
**EAU DE BOTOT**  
IS THE ONLY DENTIFRICE APPROVED  
By the Academy of Medicine of Paris.

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POWDER.....1/	8/6;	2/6, 17/ doz.	
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Of all Wholesale Houses.

SAMPLE BOXES,  
Containing  
Powder, Paste, & Liquid  
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N.B.—See each Article  
has the Signature—

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## OKELL'S ORIGINAL MONA BOUQUET

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Registered Trade Mark, "DOUGLAS PIER."

The most popular and best-selling Perfume in the market  
RETAIL PRICES, 1/1, 1/9, 3/6, 6/1, 7/6, 10/6 per Bottle.

ALSO 3d. SAMPLE BOTTLES.

Shippers and Wholesale Buyers supplied on the best terms by

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For Spirits, Oils, Perfumes,  
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[2]

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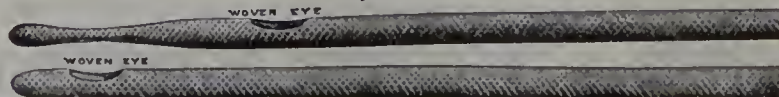
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**SOFT SILK FLEXIBLE CATHETER, GUARANTEED WITH WOVEN EYES**

To be had of all Surgical  
Instrument Makers  
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By Royal



Letters Patent.

## THE TEETHING PADS TO SELL. THE "LILY" BABY COMFORTER.

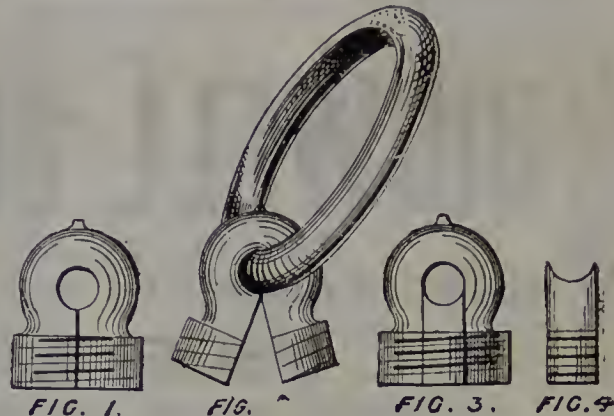
The teats are seamless, and always retain their proper shape.

THE CHILD CANNOT POSSIBLY IMBIBE AIR.

The chief feature of this invention is the free ingress and egress of air into and from the teat during suction.

3d., 4d., 6d., 9d., and 1s. Retail.

All Patterns may now be had, fitted with Marriott's New Patent Ring Socket. No. 17,135.  
For inserting Bone, Indiarubber, and other Rings into Teething Pads, Baby Comforters, or other articles without outting the ring, which is guaranteed not to break.



NEW DESIGN JUST OUT.

The "LILY" DEWDROP. Price 6d.

With Hard Rubber Pad one side of Ring and Blind Soft Teat at the other.

Patentees and Manufacturers, **E. MARRIOTT & CO., HASTINGS.**  
And of all Wholesale Houses.

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**75 ST. ANNE STREET, LIVERPOOL.**

FOR HOME, FOREIGN, & COLONIAL MARKETS.



**FULL STOCK.****PROMPT EXECUTION OF ORDERS.****AYRTON & SAUNDERS**

Have great pleasure in informing their friends that they have just received a large consignment of

**HENRI FRERES' SOAPS**

And are now prepared to execute all orders promptly.

**THE LEADING VARIETIES ARE:—**

<b>SULPHUR CREAM SOAP</b>	-	-	-	} <b>2/3</b> per dozen
<b>CARBOLIC AND GLYCERINE</b>	-	-	-	
<b>PINE TAR, DARK</b>	-	-	-	
<b>PINE TAR, WHITE</b>	-	-	-	
<b>SWEET FLOWERS</b>	-	-	-	
<b>GLYCERINE AND CUCUMBER</b>	-	-	-	} <b>3/6</b> per dozen
<b>OATMEAL</b>	-	-	-	
<b>COLD CREAM AND HONEY</b>	-	-	-	
<b>MARSHMALLOW</b>	-	-	-	
<b>WATERCRESS</b>	-	-	-	
<b>TRANSPARENT GLYCERINE</b>	-	-	-	} <b>4/</b> per dozen

All the above Soaps are **first-rate** in quality, **perfect** in finish, and not **cut** in price by Grocers and Stores, the sale being confined to Chemists. Any Chemist who has not yet stocked this brand will most certainly find it well worth his while to do so. A full Sample Set of above kinds sent post free for 3/6 in stamps or Postal Order, by the Sole Wholesale Agents for Great Britain and Ireland,

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3-lb. Boxes, per dozen, 5/4; 7-lb. Boxes, 10/9; 14-lb. Boxes, 19/9; 28-lb. Boxes, 35/10; Cardboard Packets, each sufficient for a bath, in Boxes of 12 Packets, 12/3 per dozen Boxes; White Linen Bags, each sufficient for a Bath, 3 dozen in a Box, 8/3 per gross.

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Floral Extract, 3/6, 5/-,  
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Lotion, 5/-, 10/6.

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Hair Wash, 3/6,  
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**EUCHRISMA.**  
Combines in one clear Fluid every valuable  
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For renewing the original colour of Grey Hair;  
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An elegant Preparation for  
the Hair and Beard.  
Price 2/6, 3/6, 5/-, 10/6, 21/-.

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**H. P. TRUEFITT'S TONIC TOOTH BRUSH**

(BY ROYAL LETTERS PATENT.)

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Matchless for the  
Teeth, Gums, and Breath!

Guaranteed Non-  
injurious to the  
Enamel.

Of all  
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Houses.



Prices:

1/3 size 9/-

2/- „ 15/-

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**NOTICE !!!—THE MOST PROFITABLE BRAND.**

**THE FIRM of MARIA CLEMENTINE MARTIN,**

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**Of COLOGNE, having been Awarded the SPECIAL FIRST-PRIZE MEDAL  
for their Celebrated**

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**SYDNEY EXHIBITION, 1879,**

Have the pleasure to announce to the Public that they have also obtained the First Prize Medal at the  
**MELBOURNE EXHIBITION, 1880.**

They trust that the above distinctions conferred upon them by such expert judges will be sufficient guarantee that the Eau de Cologne of their manufacture is, **without doubt, the best.** They beg to append a List of Prize Medals obtained at other Exhibitions:—

LONDON, 1851.

PARIS, 1855.

RHENISH PROVINCES, 1852.

LONDON, 1862.

NEW YORK, 1853.

VIENNA 1873.

The above Firm only export to England their DOUBLE Eau de Cologne, and request their Customers, in comparing the Prices of the different Brands, to take into consideration that the bulk of those sold with the white label are single (or only half strength of the Double), which enables the Makers to sell at a low price with great profit. If they will trouble to compare the subjoined Prices with those of any firm manufacturing Eau de Cologne DOUBLE, the comparison will be greatly in favour of our Brand.

**PRICE LIST.**

	Duty Paid, Net.	In Bond.		Duty Paid, Net.	In Bond.
No. 1.—Half Shorts.....	8/6	5/6	No. 4.—Long Green Flasks.....	16/-	11/-
No. 2.—Shorts.....	16/-	11/-	No. 5.—Wickered Bottles (Small)...	26/6	19/3
No. 3.—Shorts (finely Wickered) ...	21/3	16/6	No. 6.—Wickered Bottles (Medium) 53/-	...	38/6
No. 7.—Wickered Bottles (Large).....			106/- duty paid, net; 77/- in bond.		

Small Cases assorted to order (of not less than £3 value in bond) delivered free freight, less 7½ per cent. discount.

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## **COMPRESSED PELLETS**

AND

## **MAG. CIT. GRAN.**

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## **HOME & EXPORT.**



# LIBRARY

## Improved Products.

LONDON]

APRIL 1891.

[1891.

### HAZELINE.

A Colourless Distilled Product, containing the volatile active principles of the Fresh Green Twigs and Leaves of the Witch Hazel

(*Hamamelis Virginica*, Linn.).

This preparation contains the well-known astringent, anodyne, and hæmostatic properties of the drug in a concentrated and agreeable form. Hazeline has been extensively employed in the treatment of hæmorrhage from the nose, lungs, womb, rectum, and as a styptic for obstinate bleeding from wounds.

The chief active principles of Witch Hazel are volatile; it is therefore apparent that the Tinctures and Evaporated Fluid Extracts do not nearly represent the therapeutic value of the drug. Besides a small amount of tannin, all the active constituents are volatile, and are usually dissipated during the process of drying the drug.



The Witch Hazel Plant.  
(*Hamamelis Virginica*, Linn.)

In menorrhagia many specialists employ a tampon (B., W. & Co.), saturated with equal parts of Glycerine and Hazeline, for plugging the uterus. Dr. Edis (*British Medical Journal*, vol. i., 1890) considers Hazeline to be a very valuable hæmostatic in cases of uterine hæmorrhage. It is cleanly to use, does not stain the clothing, and is free from the objections raised against the fluid extract.

Hazeline is undoubtedly a valuable drug in the treatment of piles, fistula; anal fissure, ulcers, varicose veins, eczematous surfaces, tonsillitis, pharyngitis, nasal and post-nasal catarrh, stomatitis, leucorrhœa, nasal polypi, &c.

Dr. Ringer says it is useful in menorrhagia; the dose is two drachms twice or thrice daily. It should be given in dysmenorrhœa.

"The good results obtained with Hazeline are seemingly very general. It certainly appears to be superior to gallic acid or ergot."—*Medical Annual*, 1885-1886.

In catarrh or cold in the head, it may be sniffed up the nostrils with an equal part of tepid water.

Dose for irritated and inflamed throat and lungs, half to one teaspoonful occasionally.

Hazeline supplied to the trade in 4-oz. and 1-lb. bottles at 14s. and 42s. per dozen.

### DIALYSED IRON (Wyeth).

B., W. & Co.

A pure neutral solution of Peroxide of Iron in the colloidal form. Does not injure the teeth or constipate. Each fluid ounce contains 27.68 grains.

It is a preparation of invariable strength and purity, obtained by a process of Dialysis, the Iron being separated from its combinations by endosmosis, according to the law of diffusion of liquids.

It affords, therefore, the very best mode of administering Iron in cases where the use of this remedy is indicated.

Report of the *Lancet*:—"It is, of its kind, a perfect preparation, and is often taken without difficulty when other forms are not well borne. It is the best antidote in cases of acute poisoning by arsenic."

Supplied to the trade in 1-lb. and 1-lb. bottles at 27s. and 42s. per doz.



### HAZELINE CREAM

Is an elegant preparation, of the colour and consistence of cream, and combines the well-known anodyne and astringent properties of Hazeline with the emollient and protective action of "Lanoline." This preparation is considered by many medical practitioners to be superior to the ordinary cold cream of the pharmacies as an application for Roughness of the Skin, Chapping, Irritation, and for Weeping Surfaces such as we find in Eczema, &c.

As an application for piles, anal fissure, prolapsus ani, and irritable conditions of the anal membrane, Hazeline Cream is unsurpassed. It may be cleanly and conveniently applied by means of the Ward Cousins Ointment Injector.

Hazeline Cream supplied in elegant glass jars at 14s. per dozen, and in 1-lb. bottles for dispensing at 5s. each. The Ward Cousins Ointment Injectors supplied at 36s. per dozen.

### BEEF AND IRON WINE (Burroughs).

Highly concentrated strength-giving Tonic Food. Each tablespoonful represents the tonic and stimulant value of one ounce of GOOD FRESH BEEF with one grain of iron, in a pure MEDICINAL WINE, previously freed from tannin.



The *Lancet* reports:—"This is a really valuable preparation, and, as far as we know, a novelty. Children, as well as adults, take it easily, and, as its taste is by no means unpleasant, it can hardly fail to attain great popularity."

The *British Medical Journal* reports:—"It is a pleasant tonic and mild stimulant; it will be found useful in cases where the use of a blood tonic is indicated."

Supplied to the trade in 1-lb. and 1-lb. bottles at 22s. and 42s. per dozen; retail, 2s. 6d. and 4s. 6d. each.

### PEPSIN (Fairchild). IN SCALES OR POWDER.

Possesses the highest standard of activity and permanency.

The Pepsin prepared by the Fairchild process possesses ten times the proteolytic power of commercial pepsin when subjected to the Pharmacopœia test—i.e., 1 grain will digest 1,000 grains of coagulated albumen, instead of 100 grains only. Those pharmacists anxious to obtain a pepsin of the greatest activity for the preparation of wine, elixir, or solution should order Fairchild's Pepsin in scales or powder. It is ten times as powerful a digestive agent, and is not more expensive, than ordinary commercial pepsins.

Pepsin "Tabloids" contain each a grain of Pure Pepsin (Fairchild). Pepsin, as too often given, exerts no activity, because without an acid. This has been taken into account in making the "Tabloids," and they contain, in addition to the pepsin, a little acid with appropriate aromatics. They are extremely pleasant to take, and children eat them as readily as sweets. They do for the weakened digestive organs what they are unable to do for themselves. The action is pronounced, and the digestive assistance they give is generally immediate and complete.

Pepsin (Fairchild) supplied in scales or powder, in 1-oz. and 1-cz. bottles, at 20s. and 60s. per doz.; retail, 2s. and 6s. each.

Pepsin "Tabloids," in bottles of 25 and 100, at 14s. and 42s. per doz.; retail, 1s. 6d. and 4s. 6d. each.



CONTINUED ON NEXT PAGE.



## IMPROVED PRODUCTS—continued.

## INHALER, IMPROVED CHLORIDE OF AMMONIUM (Vereker's).

We have made several important improvements in this favourite inhaler, not the least important of which is the new valve, which prevents the possibility of blowing the water into the acid or ammonia bottles. The new style case is also a great advantage in protecting from breakage.



"The vapour of Chloride of Ammonium removes unhealthy and offensive secretions, and restores the long diseased or weakened nasal and respiratory mucous membrane to a healthy state, so that in cases of catarrh, where thickening, induration, and irritation exist, a most decided improvement is brought about in a short time." In "throat-cough," pharyngeal irritation, and relaxation and weakness of the throat, it acts as a most effective alterative and tonic to the mucous membrane.

Supplied to the Trade at 5s. each.

## DIURETIN—"KNOLL."

The New Diuretic.

Dinretin—"Knoll" is an easily soluble compound of Theobromine, in the form of a white powder, which, when warmed, dissolves in about half its own weight of water, no precipitation occurring on cooling. It acts as a powerful renal stimulant, and is of especial value when it is desired to promote diuresis in many cases of dropsy with cardiac complications, without influencing the heart's action. Dinretin—"Knoll" is more certain in its action, according to Doctors Schroeder and Gram, than either *digitalis* or *adonidin*. The usual dose is 15 grains. This quantity may be repeated as often as every four hours until its full diuretic action is established.

Diuretin—"Knoll" is supplied to the trade in 1-oz. and 2-oz. bottles, at 4s. 4d. per oz. For quantities of 100 oz. and upwards, 4s. 2d. per oz.

## THERMO-SAFEGUARD FEEDING BOTTLES. (B., W. &amp; Co.'s Patent.)

As a practical and scientific invention for protecting the lives of infants, nothing, except Fairchild's discovery of the pure Zymine Peptonising agents, has of late years approached in importance the Thermo-Safeguard Feeding Bottle.

"The Thermo-Safeguard Feeding Bottle enables the nurse to ascertain at all times the temperature and quantity of the food given to the child. The bottle has a great deal to recommend it, and is likely to come largely into use."—*British Medical Journal*.

"The best of all feeding bottles, and ought to be universally used."—*Edinburgh Medical Journal*.

It is admirably adapted for use in predigesting with the Zymine Peptonising Powders (Fairchild).

Supplied to the trade in three qualities, at 9s., 12s., and 22s. per dozen.

## ZYMINE PEPTONISING POWDERS.

These are so called because they produce *peptones*. Whenever it is proposed to peptonise milk only, and that continuously, the Zymine Peptonising Powders (Fairchild) \* will be found the most convenient form to use, for obvious reasons. They ensure accuracy, security from deterioration, and extreme convenience. For patients away from home, travelling, or visiting, these advantages will be specially appreciated. In those cases, however, where strict economy is a matter of considerable moment, the plain Zymine can be used.



Zymine (Fairchild) is supplied in three forms:—

1. In Powder, put up in  $\frac{1}{4}$ -oz. and 1-oz. bottles.
2. (a) In 3-grain "Tabloids," put up in bottles of 25 and 100.
- (b) In Compound Tabloids (of 25 or 100 in a bottle), each containing Zymine, 2 grains; Bismuth Subnitrate, 3 grains; Powdered Ipecac.,  $\frac{1}{10}$  grain.

DOSE.—One or two, an hour or so after eating.

3. In Zymine Peptonising Powders in glass tubes, a dozen in a box, each tube containing 5 grains of Zymine and 15 grains of Soda Bicarb., sufficing to predigest a pint of milk or beef-tea.

A complete list of recipes for the preparation of peptonised foods is supplied with each box of the powders.



## SALOL.

Anti-Rheumatic, Antipyretic, and Antiseptic.

Salol is tasteless, odourless, and insoluble in the gastric juice. It agrees with the stomach perfectly, in this respect presenting a marked advantage over Salicylic acid and Salicylates.

"Therapeutically, the *anodyne property* of Salol is exhibited in the cases that are rheumatic in source. . . . The first triumphs of Salol were won in the treatment of *acute Rheumatism*, excelling as it apparently does all other remedies in its power to abate pain and lessen fever. If all the conditions be propitious, by the end of the second or third day, fever and joint-pain and swelling will have disappeared."

The temperature of the body has been reduced by it from 104° Fahr. to 98° (Nenki, Lepine, &c.) Salol differs from many of the antiseptic antipyretics in that the rise of fever after the period of apyrexia is not signalled by a chill, a rigor, or even a pernicious cold stage. In general it may be asserted that Salol is free from any toxic action.

It is said to be as useful for topical application as Iodoform; and its powerful antiseptic properties render it serviceable in intestinal diseases of various kinds, and lately in the treatment of smallpox pustules, cholera, &c.

Salol "Tabloids" (5 gr.) supplied to the trade in bottles of 25 and 100, at 10s. and 26s. per dozen. Salol in crystals at 1s. 3d. per oz. or 16s. 10 $\frac{1}{2}$ d. per lb.

## PINOL DRY INHALER (B., W. &amp; CO.)

The medicament is volatilised by the air in its passage through a saturated medium, and is conveyed into the lungs and air passages.

This Inhaler may be employed at any time without danger of catching cold, and conveniently carried in the vest pocket, charged ready for use.

Charged with Eucalyptia, it affords quick relief in influenza, malarial fever, &c.

Supplied to the trade at 14s. per doz. Retail, 1s. 6d. each.

\* Beware of imitations of these Peptonising Powders. Always see that the name of FAIRCHILD is on the package, as substances of an entirely different character are being sold in the market under the name of Peptonising Powders.

BURROUGHS, WELLCOME & CO., Snow Hill Buildings, LONDON, E.C.

Above prices subject to usual discount.



# The "Kepler Solution."

LONDON]

APRIL 18TH.

[1891.

(1) In giving the "Kepler Solution," Cod-liver Oil is taken on the same plan as butter—with another food. For who would prescribe butter by itself for invalids, and that an hour after meals?

(2) It is incalculably preferable to all emulsions, which are impracticable and unscientific, disregarding as they do every principle of dietetics; no one ventures to prescribe butter for patients with alkalies, gums, essential oils, and the like, in preference to giving it with food.



(3) Though cod-liver oil is the most digestible of all oils, experiments are said to have proved that in nine cases out of ten cod-liver oil is not fully assimilated, and is frequently voided unchanged. It is needless to add that under such circumstances the digestive apparatus is unduly tried. All this misfortune is impossible with the "Kepler Solution," in which the natural process of digestion is so closely imitated that the oil is readily taken up by the lacteals.

(4) The vehicle used in the only solution of cod-liver oil made is the Kepler Extract, which should not be confounded with imitation products of fancy name.

To compare a black preparation of mixed grains with Kepler Extract, made from unadulterated barley, is like comparing a bread made from all manner of

flours with that made from one. The Kepler Extract of Malt is not black, contains no glucose, and does not have the taste of having stood in barrels. It is pleasing to the eye and as delicious as cream. The following verdict on the vehicle of the Kepler Solution tells whether or not it is the best malt preparation extant:—

The *Lancet*:—"It is the best known and most largely used."

The *Medical Press and Circular*:—"The most palatable and easily digested."

(5) As the Kepler Malt Extract is rich in diastase, and therefore a promoter of digestion, and is most abundant in carbo-hydrates and proteids, and as nutritious as cream, its nutritive value is unexcelled.

As a menstruum, and a solvent for cod-liver oil, it is a food which deprives the latter of its indigestibility, and also its unpleasant odour and taste. One physician reports:—"My patient (a consumptive) protested that he could not take oil. I assured him he could take the preparation ordered. He improved steadily, is out of doors, coughs but little, has regained his flesh and appetite, lost his night-sweats, and expects to go to work at his trade in a few days."

The Kepler Solution is—

(a) A most powerful fattening and strengthening agent.

(b) The best roborant in bronchial troubles, phthisis, &c.

(c) The choicest form of oil for children with anæmia, scrofula, rickets, &c.

(d) A most natural and effective agent for overcoming infantile constipation.

(e) The purest and best of all forms of cod-liver oil to prescribe for dyspeptic and fastidious patients.

## "SUMMING UP."

THE BRITISH MEDICAL JOURNAL reports:—"The Kepler Solution is an ideal form for the administration of fat."

Please note the Reduced Prices.—The "Kepler Solution" and Kepler Extract of Malt supplied to the Trade in ½-lb. and 1½-lb. bottles, at 20s. and 36s. per doz. Retail prices, 2s. 6d. and 4s. each. Supplied by all Wholesale Houses throughout the World.

BURROUGHS, WELLCOME & Co., Snow Hill Buildings, LONDON, E.C.

SUBJECT TO USUAL DISCOUNT.



# THE VERDICT

## CONFIRMED.

*THE LANCET* writes (January 31, 1891):—

“The therapeutie value of extract of malt rests not only upon the presence of important food elements. as dextrin, maltose, and alkaline phosphate, but on the peeuiliarly active substance, diastase, which is concerned in converting the starch of farinaceous food into the more assimilable products. The masterly researhes of Messrs. C. O. Sullivan, Brown, Heron, and Morris have shown that diastase is without action upon unaltered starch, or starch as it occurs enclosed in the cell. As soon, however, as the cellulose envelope of the granule is broken either by bruising or boiling, the starch granulose rapidly undergoes conversion or hydrolysis, even in the cold, into maltose and a variety of dextrin ealled erythro-dextrin. It is some time now since we had occasion to examine the well-known and much-used KEPLER EXTRACT OF MALT. Messrs. Burroughs, Welleome & Co. evidently keep pace with the newest scientific facts, which every day contribute towards making this kind of preparation perfect. This is shown by the following analysis of a specimen which was recently submitted to us.

“One part by weight of the Extract was found to completely convert in one hour at 100° F. seven times and a-half its weight of starch into maltose and dextrin; in two hours at the same temperature fifteen times its weight of starch; and in three hours no less than thirty times its weight. Probably at a higher temperature KEPLER EXTRACT OF MALT would be capable of converting a still larger quantity.

“Moisture, 18.41 per cent.; solid matter (diastase, albuminoids, maltose), 80.37 per cent.; mineral matter (for the most part soluble phosphate), 1.22 per cent. The flavour has been further improved, and the delicacy of the colour contributes largely to its attractive appearance.”

*THE BRITISH MEDICAL JOURNAL* writes (March 28, 1891):—

“The KEPLER MALT EXTRACT, which is highly concentrated, possesses a very high diastasic power. . . . It is entirely free from chemical preservatives, the presence of which would, of eourse, render the diastase inactive; and it may be recommended as a thoroughly sound and reliable preparation.”

The Kepler Extract of Malt and the Kepler Solution supplied to the Trade in bottles containing  $\frac{3}{4}$  lb. and 1 $\frac{1}{2}$  lb. at 20s. and 36s. per doz. Retail, 2s. 6d. and 4s. Supplied by all Wholesale Houses throughout the World. Subject to usual discount.

**BURROUGHS, WELLCOME & CO., Snow Hill Buildings, LONDON, E.C.**



# TO THE POINT.

## Soluble "Tabloids"

OF

## Compressed Drugs.

LONDON]

APRIL 18TH.

[1891.

PHARMACY has given to medicine no other method of administering drugs equal in elegance to the SOLUBLE TABLOID form, PROPERLY MADE. These words are used advisedly, for, owing to the ready recognition of "Tabloids" by the profession, and the consequently great demand for them, many inferior compressed goods have been put upon the market by those having indifferent facilities for their manufacture,—the resultant products reaching the patient in a more or less pulverised condition, thus ensuring inaccuracy of dosage and inelegant appearance. The recommendation of such imperfect preparations being of a variable and elastic nature, the mind of the medical practitioner is gulled for the moment, and the subsequent discovery of defects causes both doctor and patient pronounced and lasting disappointment.

It is, we believe, due to our efforts in producing "Tabloids" both elegant in appearance and accurate in dosage that this variety of medication has become so popular among physicians; and it is only of late years that persons, jealous of our success, and wishing to

reap the results of our industry and enterprise have been prompted to imitate the advertisements, labels, and packages of our products, and also trade marks as far as was safe. They have not attempted to *make* better products, but their whole industry is turned to *persuade* us that they have made such. *Cogito ergo sum.* The improvements which we first discovered and proclaimed to the profession were promptly recognised by the medical and pharmaceutical press, whose favour

able criticisms attracted the imitative attention of those persons mentioned. We have a special laboratory in our manufactory at Dartford, Kent, in which we prepare the "Tabloids" of Compressed



BURROUGHS, WELLCOME & CO.'S SNOW HILL LABORATORIES, DARTFORD, KENT, ENGLAND.

Drugs, which are as yet unequalled in excellence by any imitation products whatsoever. Our experiments and progress towards perfection are not only of recent date, but have been in constant progress from the first introduction of Compressed Tablets and "Tabloids." In fact, the services of several of our staff of expert English pharmacists and chemists have been solely devoted to this work in our laboratory for years past.

The following reports speak volumes as to the disintegrating properties of our products:—

### 1888.

"Those ['Tabloids'] destined for internal administration are less dense and quickly **DISINTEGRATE**, as Bismuth Subnitrate, Manganese Dioxide, Chareoal, &c."—BRITISH MEDICAL JOURNAL.

### 1890.

"'TABLOIDS' OF SULPHONAL AND OTHER SPARINGLY SOLUBLE DRUGS.

"We have examined 'Tabloids' of Compressed Sulphonal, Phenacetin, &c., by Messrs. Burroughs, Wellcome & Co., Snow Hill Buildings, E.C., and find that when they are put into water they readily break and fall to powder, which can be easily suspended by shaking. Placed upon the tongue, they immediately begin to soften and **DISINTEGRATE**. This specially compressed form possesses, therefore, the great advantage of permitting the subsequent absorption of insoluble drugs in consequence of the fine state of division into which they are reduced in the stomach."—BRITISH MEDICAL JOURNAL.

**BURROUGHS, WELLCOME & CO., Snow Hill Buildings, LONDON, E.C.**

*Will be happy to send Trial Specimens of Soluble "Tabloids" and new and complete Price List to Pharmacists, post free, upon request.*



# REMINGTON'S PHARMACY.

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There is no work on modern pharmacy which deals so comprehensively with the details of the pharmaceutical art and its appliances as this volume. Its 500 illustrations are most useful aids to the pharmacist in perfecting the practical work of pharmacy.—*Chemist and Druggist*.

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See Recommendatory Notice of Medical Press and Opinions of the leading Dermatologists.

## WRIGHT'S

Detergens, acting for four hours, arrested future growth.  
Of all Druggists, Wholesale and Retail, throughout Great Britain, Ireland, and Colonies.

## LIQUOR

From the *Lancet*, Dec. 22, 1886 :—"In our hands it has been a most effective agent in skin diseases, especially of the chronic eczematous class, and one class of psoriasis which had resisted all other kinds of treatment speedily got well under the application of the *Liquor Carbonis Detergens*. We esteem it a very valuable addition to our list of skin remedies."

1871 :—"We have tested it, and can affirm its value as a detergent agent. We consider the *Liquor* is an article of great utility."

Kept in stock and sold by all Druggists (Wholesale and Retail) throughout the United Kingdom and Colonies. PROPRIETORS—

**W. V. WRIGHT & CO., 48 Southwark Street, LONDON.**

## CARBONIS

## DETERGENS.

The *Practitioner* of September, 1881 :—"Eczema connected with varicose veins of the leg—also Pruritus Scroti, Labiorum, and Ani—is best relieved by weak tarry lotions, one of the best of which is *Wright's Liquor Carbonis Detergens*."

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ESTABLISHED 1852.

PRINCIPAL OFFICE, 42 CANNON STREET, LONDON, E.C.

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1871:—"We have tested it, and can affirm its value as a detergent agent. We consider the *Liquor* is an article of great utility."

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## CARBONIS

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CONDUCTED BY RICHARD J. MOSS, F.C.S., F.I.O.

#### QUALITATIVE ANALYSIS.

**T**HE subject of the next exercise in qualitative analysis will be a mixture of *three* salts of common occurrence. The mixture is to be submitted to a thorough systematic examination; its constituents are to be detected, and all other substances proved absent.

Students' applications for portions of the mixture will be received up to Wednesday, April 22, and the samples will be forwarded immediately.

Students' reports will be received up to Saturday, May 2. Each report should contain a concise account of the work done, and should include a list of the constituents detected, distinguishing any which may be regarded as accidental impurities.

#### REPORTS.

The mixture of salts sent to students last month consisted of three parts of ferrous sulphate, one of nickel sulphate, and one of manganese sulphate. Its calculated composition was as follows:—

Mn..	..	..	..	..	..	4.55
Fe ..	..	..	..	..	..	12.09
Ni ..	..	..	..	..	..	4.20
SO <sub>4</sub> ..	..	..	..	..	..	35.52
H <sub>2</sub> O ..	..	..	..	..	..	43.63
						100.00

The mixture contained a trace of chlorine.

There were thirty-four reports sent in, including eighteen in which the constituents of the mixture were correctly reported.

The two chief constituents of the powder were detected by all our correspondents, but manganese was omitted by thirteen, and nickel by nine.

Some of our correspondents obtained the first indication of manganese, in the preliminary examination, by heating a portion of the powder in a bead, or on platinum foil, with sodium carbonate and nitrate, when a green mass was obtained, mixed with a dark-coloured undissolved oxide. The undissolved portion consisted of the oxides of iron and nickel, and the green mass consisted of sodium manganate. This is a very delicate reaction, but it does not appear to have been observed by several of our contributors who tried the experiment. In some cases, no doubt, the presence of a large amount of ferric oxide prevented the student from noticing the green manganate. All blowpipe reactions are liable to such disturbing influences, and it is always necessary to bear in mind that the results obtained by such tests in the examination of mixtures may be very different from those produced by pure substances.

In the separation of these metals by the wet method there was no serious difficulty to overcome. To prevent the precipitation of manganese by ammonium hydrate it was necessary to have a sufficiency of ammonium chloride present. If this precaution was attended to, manganese was thrown down afterwards as sulphide in conjunction with nickel, and the widely different behaviour of the two sulphides with dilute hydrochloric acid, admitted of a separation sufficiently complete for qualitative purposes.

#### PRIZES.

The First Prize for the best analysis has been awarded to **WALTON PORTER**, 9 Edge Hill, Whitehaven.

The Second Prize has been awarded to

**JOHN SMITH**, 91 Shaw Heath, Stockport.

#### Marks Awarded for Analyses:

Walton Porter (1st prize)	..	98	Cadarn .. .. .	89
John Smith (2nd prize)	..	96	H. Bowden .. .. .	78
A. G. Hendry .. ..	..	94	Sisylana .. .. .	76
A. Shaw .. .. .	..	93	Incipio .. .. .	74
Longston .. .. .	..	93	Secundus .. .. .	7
Mayhitt .. .. .	..	92	Verdant Green .. ..	70
A. M. S. .. .. .	..	92	T. Brown .. .. .	70
A. Blowpipe .. ..	..	92	J. H. Hoseason .. ..	70
Viola .. .. .	..	90	H. G. F. .. .. .	65
Minore .. .. .	..	90	Glycerinum .. .. .	65
Juvenis .. .. .	..	89	F. H. F. .. .. .	60
Cubeb .. .. .	..	88	Sapientia .. .. .	55
A. Thorpe .. .. .	..	88	Tempus Fugit .. ..	55
Col. Chicum .. ..	..	87	J. B. .. .. .	55
Heanley .. .. .	..	85	N. Y. Z. .. .. .	50
John .. .. .	..	86	L. O. V. .. .. .	40
W. Hood .. .. .	..	85	Cogito .. .. .	40

#### TO CORRESPONDENTS.

**Prizes.**—The students to whom prizes are awarded are requested to write at once to the Publisher, naming the book they select, and stating how they wish it forwarded.

Any scientific book that is published at a price not greatly exceeding half a guinea may be taken as a first prize.

Any scientific book which is sold for about five shillings may be taken as second prize.

**Note.**—All communications should include the names and addresses of the writers.

**VIOLA.**—It is a mistake to omit the preliminary examination, blowpipe-tests, action of heat, &c.; the results are often of great assistance in the subsequent more systematic part of the analysis.

**MINORE.**—It is not clear that an excess of nitric acid was present when you added silver nitrate; if not, the precipitate you obtained consisted of silver sulphate.

**CUBEB.**—The nitric-acid solution of ammonium molybdate produces, with phosphoric acid, a distinctly crystalline precipitate—not merely a yellow colouration. This precipitate contains only 4 per cent. of phosphoric anhydride, so that a small quantity of phosphoric acid yields a considerable precipitate.

**COL. CHICUM.**—You do not say whether any notable quantity of aluminium hydrate was precipitated. Aluminium is a common impurity in hydrates of the fixed alkalis.

**W. HOOD.**—The reactions you attributed to zinc were due to manganese. You probably added too little sodium hydrate to the solution obtained by treating the sulphides with hydrochloric acid, and thus you failed to precipitate the manganese completely.

**CADARN.**—If there was a decided excess of ammonium chloride in the solution to which you added ammonium hydrate, the manganese would have remained in solution (provided it had not been oxidised to the manganic state), and would afterwards have been thrown down as sulphide. If there was not enough ammonium salt present, the manganese would have been precipitated with the iron.

**H. BOWDEN.**—The use of ammonium phosphate to separate magnesium from the alkalis is not a good plan. When the solution is evaporated, the phosphoric acid remains, thus giving a residue even in the absence of alkalis. It is better to employ either barium or calcium hydrate to precipitate the magnesia, the excess of barium or calcium may be removed as carbonate.

**SISYLANA.**—Your preliminary examination was very superficial. A small quantity of the powder heated in a bead of sodium carbonate, with a little nitrate, gave a distinct manganese reaction.

**INCIPIO.**—The quantity of powder sent was quite sufficient for a complete qualitative analysis. The preliminary examination in the dry way is most important, and should not be omitted.

**SECUNDUS.**—Your report was carelessly drawn up, and was not very intelligible.

**VERDANT GREEN.**—If a hyposulphite had been present, sulphurous anhydride would have been evolved, and sulphur separated when hydrochloric acid was added to a solution of the powder.

**T. BROWN.**—See remarks to "Verdant Green." Your statement that the barium chloride precipitate was partially decomposed by hydrochloric acid is indefinite.

**J. H. HOSEASON.**—The addition of hydrochloric acid to the aqueous



solution did not result in the separation of sulphurous acid, as it would have done in the presence of a sulphite.

H. G. F.—The evolution of sulphurous anhydride on heating a salt does not always indicate a sulphite. For example, when ferrous sulphate is heated strongly, the residue that remains is ferric—not ferrous—oxide; the oxidation of the iron takes place at the expense of part of the sulphuric radicle, with the production of sulphurous anhydride. If you repeat your tests for the chloric radicle with potassium chlorate, you will find the reactions very different from what you suppose.

GLYCERINUM.—Your name and address should always accompany any communication.

F. H. F.—The production of a green mass on fusing the powder with sodium carbonate and nitrate was quite unmistakable.

SAPIENTIA.—You make no mention of any preliminary examination.

TEMPUS FUGIT.—When the ammonium sulphide precipitate was treated with dilute hydrochloric acid, nickel sulphide remained, and was easily identified by the borax bead test.

X. Y. Z.—You omitted to give a summary of your results. When you added nitric acid to the hydrochloric-acid solution you observed that it became yellow. This change was due to the production of ferric chloride. The fact of your having obtained a precipitate with ammonium carbonate shows that you did not use the preceding group reagents in sufficient quantity.

L. O. V.—If an arsenate had been present the arsenic would have been precipitated by sulphuretted hydrogen.

## Provincial Reports.

*Items of news, and newspapers containing matters of interest to the trade, sent to the Editor will much oblige.*

### BIRMINGHAM.

MR. CROOKE who was formerly senior partner in the firm of Crooke & Abraham, has become manager for Mr. Groves, chemist, of Walsall.

AT THE NEXT MEETING of the M.C.C.A. on April 21, a paper will be read, entitled "Methods for Taking Specific Gravities," by Mr. J. F. Liverseege, A.I.C. The paper will be practically illustrated.

MESSRS. EVANS & Co. have presented the M.C.C.A. with two new handsome materia medica cabinets for their library which will be, it is understood, available for the use of members and their pupils under certain conditions. The money value of them is about 15*l*.

THE PRELIMINARY EXAMINATION of the Pharmaceutical Society was held in this city on Tuesday last at the Midland Institute. There were twenty-eight candidates including two ladies. This is one of the largest if not the largest number ever known to sit for this examination in Birmingham. Mr. Thompson was superintendent.

THE MEDICAL CLASSES of Queen's College are now all held in Mason's College, where for some time a part of the work has been carried on. The whole effects of the college have also been removed to Mason's College. During the last few years there has been a great increase of medical students, and this has rendered the present accommodation much too small, whilst the Queen's College authorities have no funds available which would permit them to carry out the necessary reconstruction. New buildings, adjoining those of Mason's College, and connected with them, but having also an independent entrance, will be erected for the school of medicine, and in the plans, provision will be made for the largely-increased number of students whom it is expected the enlarged facilities will attract.

### NOTTINGHAM.

THE PHARMACY BILL.—A meeting of the chemists of Nottingham was held at the Masonic Hall on April 8 to consider the Pharmacy Acts Amendment Bill. After an animated discussion, in which the Bill was well criticised, and the absence of measures beneficial to the trade strongly commented upon, the following resolutions were unanimously carried:—

- (1) That this meeting heartily supports the Pharmacy Acts Amendment Bill, but is of opinion that a strong effort should have been made to reserve the title of chemist and druggist to those qualified by examination and registration; and also that the sale of the compound preparations of the Pharmacopœia should be restricted to registered persons.

(This to be sent to the Pharmaceutical Society.)

- (2) That the secretary of the N.N.C.A. be instructed to ask local members of Parliament to support the second reading of the Bill.
- (3) That this meeting requests the council of the N.N.C.A. to take what steps they think best in the interests of the trade during the progress of the Bill.

### IRELAND.

PHARMACEUTICAL SOCIETY OF IRELAND.—The following candidates have successfully passed the Preliminary examination of this body:—Messrs. S. Hogg, J. A. Stewart, J. A. Hogg, H. Prior, A. H. Jones, W. E. Jolliffe, R. S. Moore, T. S. Taylor, A. E. Welsh, M. F. Fitzpatrick, E. Barnes, R. Leatham, and A. Farrington. Ten were rejected. The undernamed gentlemen have also qualified as registered druggists:—Messrs. H. C. Backhouse, R. S. Chapman, T. J. Connery, J. Darcy, D. Donohoe, H. Farrell, J. A. Gardener, T. E. Gordon, W. Gore, B. Haydock, E. M. Hewetson, F. C. Judge, L. Kingsmill, J. R. Middleton, J. Mullen, J. J. O'Donnell, T. H. Parker, R. H. Percy, R. Poole, P. C. Roche, R. E. Scarlett, W. Selkirk, W. Wade, R. J. White, and W. Willis. Of the twenty-five candidates not one was rejected.

ALLEGED INACCURATE DISPENSING.—Besides the case reported from Dublin under Legal Reports, in which 200*l*. damages have been awarded to a complainant who had been supplied with a wrong medicine, another case has been mentioned in the law courts. On Friday last, in the Queen's Bench Division, before Mr. Justice Holmes, Mr. J. P. Maxwell moved, on behalf of Messrs. Harrington & Co., chemists, Cork, to remit an action instituted against them by a Mrs. Sullivan for hearing before the Recorder of Cork. The action was brought to recover 100*l*. damages for alleged negligence in supplying the plaintiff with poisonous medicine, whereby she was incapacitated from following her ordinary business. The affidavit of Mr. Stanley Harrington, a director of the defendants' company, set out that the company had a good defence to the action. The plaintiff was not at any time supplied with any medicine other than what she asked for. The plaintiff was a vegetable-dealer in Cork, and had no means outside her business, the proceeds of which were only sufficient to maintain her. The application was granted.

### SCOTLAND.

#### ABERDEEN.

THE ABERDEEN AERATED-WATER CASES.—The appeal in the case of Cameron (sanitary officer) *v.* Sangster has been abandoned. The other two cases are down for hearing on April 28.

CHEMISTS' ASSISTANTS' ASSOCIATION.—The annual meeting of this association was held on April 10. The treasurer's report showed a balance in favour of the association. The following were then elected office-bearers for next session:—Hon. president, Mr. G. Cowie, Ph.Ch.; president, Mr. W. Penny; vice-president, Mr. A. G. Milne; secretary, Mr. Rennie; assistant secretary, Mr. A. Milne; treasurer, Mr. Forbes; members of committee, Messrs. Bruce, Hay, Leslie Robertson, Spence, Watt.

#### DUNDEE.

DR. PIRIE, who trades as "P. Sandeman & Co, chemists and druggists," has now opened his shop in Whitehall Street, and has closed the one in the Pillars. The consequence is that Mr. Forsyth, the new lessee, cannot get possession for at least a month.

CHEMISTS' ASSISTANTS' AND APPRENTICES' ASSOCIATION.—At a meeting of this association on Thursday, April 9, a lecture was delivered by Mr. John Foggie, F.C.S., University



College, on "The Air we Breathe." After describing the gaseous constituents of the atmosphere Mr. Foggie spoke about the solids—viz, organic matters, dust, and micro-organisms. From an analysis of the air of schools it has been found that the number of micro-organisms present was less after the children had been some time in the school—this seeming to point to the conclusion that these bodies were detained by the air-passages. The cubic space allowed in schools for each child is, the lecturer considered, too small, being equal to a cube the side of which measured 4 feet 4 inches. Numerous instances were given of the danger to human health through badly-ventilated buildings. The air of churches is often particularly objectionable in this respect. What Mr. Foggie characterised as a "dim religious smell" is very frequently to be found the result of the decomposition of the organic matter expelled from the breath and skin and the want of effective ventilation during the week. Numerous experiments were made in the course of the lecture, and at the close Mr. Foggie was awarded a hearty vote of thanks, which was supplemented by his being elected an honorary member of the association. Afterwards a report of the apprentices' prize essay competition was submitted.

#### EDINBURGH.

**THE LATE MR. RAIMES.**—The funeral of Mr. Richard Raimes, whose death from an attack of pleurisy we announced last week, took place at Warriston Cemetery on Monday, the body having been conveyed from Stormontfield, Perthshire, to the family residence, Bonnington Park, Leith. There was a large and representative company at the funeral, including many Edinburgh chemists. We understand that the death of Mr. Raimes will make no change in the conduct of Raimes, Clark & Co.'s business.

**CHEMISTS' ASSISTANTS' AND APPRENTICES' ASSOCIATION.**—The annual business meeting was held in the Pharmaceutical Society's house, 36 York Place, on the evening of Wednesday, April 8, at 9.15, Mr. Donald McEwan, president, in the chair. The treasurer's financial statement showed a balance of 5*l.* 18*s.* 8*d.* The secretary's report stated that the membership remained as last year. The reports were adopted, and the following officers were elected:—President, John Lothian; vice-president, James Henry Hoseason; secretary, William Beaverley Cowie; assistant secretary, Alexander O. Findlay; treasurer, Alexander J. Dey; and as members of committee, Messrs. Hendry, MacLaren, Murray, Petrie, A. Robertson, R. Robertson, Smith, and Weir. The following were also elected members of the prize committee:—Messrs. Boa, Duncan, and McEwan.

#### GLASGOW.

**ASSISTANTS' ASSOCIATION.**—The final meeting of the session, postponed from March 30, was held on April 9, when Mr. A. Kinninmont gave the closing address. The subject of this was "Pharmacy Acts, Past and Present," comprising facts within his own personal knowledge, and his inferences from them as to the whole course of pharmaceutical legislation from 1868 onwards. Except to those who, like himself, had a living memory of the circumstances, it was impossible to conceive, he said, of the almost panic-stricken temper of the public mind in the 1868 decade on the subject of poisons; indeed, one would have imagined that the entire community was in the direct danger of wholesale poisoning. It was in the midst of these factitious alarms that there arose a demand for legislation on the subject, and two rival measures were promoted on behalf of the trade—the one by the Pharmaceutical Society, and the other by the United Society of Chemists and Druggists. It had been alleged then and since that the Pharmaceutical Society arbitrarily forced their measure on an unwilling constituency, but this was a delusion. In reality, the Society spared no pains or expense to ascertain the sense of the trade; and in the matter of registration, which the Government wanted to have optional, but which, at the instance of the Society, was made compulsory, the Society behaved with great liberality. No one had anything to pay for registration. Some judges and other persons, who ought to be better informed, had stigmatised the Act of 1868 as a clumsily-framed statute, but he ventured to affirm that the real defect alone existed in the minds of these wiseacres. As a matter of fact—as he could prove to them from Hansard's

reports of the debates on the Bill—every clause of it was carefully dissected and adjusted. The general doctrine of the Act is that every man must be qualified before starting business on his own account, but no one dreamed at the time—nor does a knowledge of the details of the making of the Act support the idea—that the qualification of the assistant is compulsory. The phrase "sell or keep open shop," in section xv., was supposed to imply a distinction between selling and shopkeeping; but a reference to Hansard elicited the fact that "sell or keep open shop" was introduced by Lord Robert Montague to obviate the contingency of poisonous drugs being sold on the street. Mr. Kinninmont then referred to the relation of surgeon-druggists to the Act, and how they were put right by the Act of 1869. He then referred to the Wheeldon case, saying that this was another example of monstrous perversion of the Act, afforded them by the decision of an English coiner—he thanked Heaven they had no such officious functionary in Scotland—which sought to impose a definition on the phrase "patent medicine" which was totally alien to the spirit, if not to the letter, of the Act. If section xvi. was not wildly incoherent it meant that proprietary articles containing scheduled poisons should be exempted from the other provisions of the Act, for obviously it would have been the merest falsity to provide an exemption for extra-scheduled poisons. This was the view taken by patent-medicine dealers at the time, and it was on that understanding that their opposition was disarmed. In 1871 a most vexatious measure for the regulation of the sale of poisons, partly promoted by the Pharmaceutical Society, was introduced. The Bill required a poisons press, special poison bottles, &c. They in Scotland would have been specially harassed by these restrictions, and to aggravate the injustice the doctors would have enjoyed complete immunity from the regulations. In Glasgow they hurriedly called an indignation meeting, which was held in the midst of one of the most terrific thunderstorms he ever remembered. A deputation was appointed to co-operate with the Edinburgh people, to go up to London, and lay the protest before the Government. Fortunately, just at that time a new form of whisky-flask came into use which closely simulated the shape and appearance of the proposed poison-bottle, and the deputation collected specimens of these and laid them upon the table in the committee-room of the House of Commons, where they seemed to produce a considerable impression on the committee, although they provoked the somewhat frequent question, "Gentlemen, were these empty when you started?" The result of the opposition was well known. In the remaining portion of his address Mr. Kinninmont dealt with the rise of co-operative stores; the judicial decisions respecting them; to the draft Pharmacy Bill of 1883, with its "Qualification of Branch Managers" clause which he claimed as a confirmation of his conception of the "unqualified assistant" question, which he holds to be the logical consequences of applying the term "seller" to the assistant, which would subvert the entire fabric of business, and, referring to the action of the Pharmaceutical Society in the Wheeldon case, Mr. Kinninmont characterised it as the shabbiest and most cowardly thing the Society had ever done. In concluding Mr. Kinninmont said he was hopeful that chemists would soon see daylight through most of their troubles. He was warmly thanked for his address. Thereafter the annual business meeting was held, when the secretary and treasurer presented their reports and the following gentlemen were elected to serve during the next session:—Hon. president, Alexander Kinninmont; hon. vice-presidents, John McMillan and Robert McAdam; president, James Robb; vice-presidents, Alexander Laing and James Bruce; secretary, George Robertson; treasurer, John Currie; librarian, Benjamin Cartwright; committee, Messrs. Abbot, Inland, Watson, Martin, and Crail.

#### INVERNESS.

**CHEMISTS' ASSISTANTS' ASSOCIATION.**—At the meeting held on Tuesday Mr. Lewis Macleod gave a lecture on "The Testing and Stocking of Drugs." The lecture was practically illustrated, and in the course of it the author reported on the examination of the following preparations, apparently purchased in the neighborhood:—Seven samples acid.



hydrocyan. dil., B.P., showed (1) 2 per cent., (2) 1 per cent., (3) 1.42 per cent., (4) 1.81 per cent., (5) 2 per cent., (6) 1.6 per cent., and (7) 2 per cent. of HCN. Four samples ferri carb. saccharat. contained (1) 27.32 per cent., (2) 34.8 per cent., (3) 32.8 per cent., and (4) 42.3 per cent.  $\text{FeCO}_3$ . The lecturer stated that he had analysed several samples pil. ferri (Blaud), some freshly made, others coated and kept for a lengthened period, and that in every case he had found each pill to contain fully one grain of ferrous carbonate. The results of analysis of seven samples spt. æther nit., B.P., were as follows:—(1) 4.1, (2) 4.7, (3) 4.4, (4) 2.8, (5) 4, (6) 5.5, and (7) 5.1 vols. nitric-oxide gas. The various acids and alkalies were found, as a rule, to be very pure and up to standard strength. liq. bismuthi was not quite satisfactory. To emphasise the necessity and importance of chemists testing their drugs before stocking, the lecturer stated that, some time ago, a stock of liq. bismuthi, B.P., was received, which, on examination, turned out to be peroxide of hydrogen.

## General News.

**WOUND UP.**—Mr. Justice North, on Wednesday, made the usual order to wind up the Dæ Oil Company.

**THE NEW ITALIAN PHARMACOPŒIA** has been promised many a time. Now it is stated that it will be published in June.

**THE PHARMACEUTICAL EXAMINATIONS** this month are exceptionally heavy, there being a "rush" of candidates before the new schedule comes into force in October next.

**A CHEMISTS' DANCE.**—On Thursday, April 9, the members of the Brighton Junior Association of Pharmacy gave a cinderella dance at the Royal Pavilion, which was attended by about 150 guests.

**NO CONSOLATION IN IODINE.**—Francis Frecguard, a hair-dresser, of Newport, Monmouth, tried to end his troubles with two-pennyworth of tincture of iodine last week. A few days in the county infirmary was the result.

**SOCIETY OF CHEMICAL INDUSTRY.**—The London section will meet in the Chemical Society's Rooms, Burlington House, on Monday, April 20. The following papers will be read:—Mr. W. P. Rix, "Stoneware and its Application to Chemical Apparatus"; Dr. S. Rideal and Mr. A. P. Trotter, "Tanning by Electricity."

**A FIRE** occurred on Tuesday morning on the premises in Waterhouse Lane, Hull, occupied by Mr. L. Foulston, chemists' sundryman. The fire originated amongst a quantity of cardboard boxes, and was only prevented from spreading to a room containing a quantity of turpentine and similar inflammables with the utmost difficulty.

**LIVERPOOL PHARMACEUTICAL STUDENTS' SOCIETY.**—Mr. George Brimson, of 53 Hanover Street, Liverpool, has been elected honorary secretary to this society, in place of Mr. Frank Walker, who has resigned, much to the regret of all members. The session is to close on April 23 with a smoking concert at the Falcon Restaurant, 30 Lord Street.

**DISPENSING IN WORKHOUSES.**—The dispensing in the Stoke Workhouse had been done for many years, quite satisfactorily, by a nurse, but lately the Local Government Board has required that a qualified dispenser should be employed. At the last meeting of the Stoke Guardians the medical officer reported that he had engaged a qualified dispenser, but he pointed out that when he took the duties in 1879 his predecessor had explained to him how the work had been done in the past, and he had no idea that the dispensing was included in his duties.

**DEATH FROM CHLOROFORM.**—On April 10 an inquest was held at Darlington, before Mr. J. T. Proud, deputy coroner, on the body of Frederick Claude Graham Stock, aged 19, eldest son of Mr. W. F. K. Stock, Durham county analyst. Evidence having been tendered that deceased, who had of late been indisposed, had been in the habit of taking chloroform, and that a 4-oz. phial of the drug, containing, however, only  $2\frac{1}{2}$  oz., had been found in the bed beside him, the coroner, in summing up, said from appearances an over-

dose of chloroform had been taken inadvertently. Verdict, "Death from an overdose of chloroform, taken by misadventure."

**ANXIOUS INQUIRIES.**—A correspondent of the *Cornwall Gazette*, writing from Gwennap, says a well-dressed young quack doctor has recently been in this neighbourhood, and several nervous people have been rather seriously frightened by him. He seems to push his business somewhat as follows:—"Good morning, madam. I have called for a medical card recently left with you. Are you all well? I see, my dear madam, you are far from well. You are, perhaps, unconscious of it, but you are suffering from a weak heart; at any moment you may drop down dead. Now, I have a box of pills which will do you good. Sixteen-pence a box, madam. Thank you. Now, you would do well to have another box—another kind of pill. Take one after dinner from the first box to-day, and one from the second box to-morrow. Yes; sixteen-pence a box, same as the first. Thank you. Good day."

**GRINDLEY & CO. (LIMITED).**—The first annual general meeting of Grindley & Co. (Limited), of Poplar, was held at the Great Eastern Railway Hotel, Liverpool Street, London, on March 19. The chairman, Mr. J. Smart, of Stevenage, in moving the adoption of the report and balance-sheet, referred to the death of the first managing director, Mr. John Grindley, and said they had appointed their secretary, Mr. W. S. Duff, to be manager and secretary. Mr. Duff had been with the old firm many years, and had a thorough knowledge of the business. They had paid out of their profits the extra expenses incurred in forming the business into a limited company, and had also spent a considerable amount on renewals and repairs to plant. Out of the balance it was proposed to pay a dividend of 8 per cent. for the year ending December 31, 1890, 4 per cent. of which had already been paid; also to write a further sum of 200*l.* off plant account, and, after paying directors' fees, to carry the balance forward. The report and accounts were adopted.

**"TAKE ALL THE EPSOM SALTS."**—In the City of London Court on Monday, before Mr. Commissioner Kerr, the case of Bowles and Cross v. Swyer was heard. The plaintiffs, Messrs. Bowles & Cross, of 3 Lambeth Hill, E.C., sought to have the defendant, Mr. Septimus Swyer, surgeon, of 23 Whitechapel Road, committed to prison for the nonpayment of 5*l.* 16*s.* 10*d.* due. The plaintiffs' representative said the defendant was in a very good position and with a good practice. The defendant's representative said he was in a very bad way, as he had ten judgments against him. Mr. Commissioner Kerr: Why do the plaintiffs not levy on his drugs and other things? The Plaintiffs' representative: Can we do that? Mr. Commissioner Kerr: Yes, take all the Epsom salts you can find in particular. (Laughter.) No order was therefore made on this summons, the plaintiffs to levy execution on the defendant's goods.

**THE SALE OF RAT-POISON.**—At an inquest held at Poole, on Florence Fry, aged 17, who died at her father's house from the effects of phosphorus-poisoning, it appeared that she had bought some phosphorus-poison at the Southern drug stores, and Mr. Arthur Bolton, surgeon, stated that on a post-mortem examination, it was found that the mucous membrane of the stomach was eaten away in many places. He stated that small pots of phosphorus paste, similar to that purchased by deceased, and bearing the name of a German firm, were sold at 3*d.* each, and he thought they could be obtained at almost any chemist's or grocer's. The coroner said that the Sale of Poisons Act imposed strict conditions as to the sale of dangerous poisons, but phosphorus was not included in the schedule. He thought something should be done to prevent the indiscriminate sale of this poison. The jury appended to their verdict an expression of regret that restrictions, similar to those in the Sale of Poisons Act, did not apply to the sale of phosphorus paste and other rat-poisons.

**WHOLESALE ARSENIC POISONING IN SCOTLAND.**—An extraordinary series of poisoning cases took place in Crieff during last week, more than sixty persons having been seriously ill. It has been discovered that a quantity of sugar had become impregnated with arsenic by some means unknown, and, as many persons used the sugar with tea, they suffered severely. An old man named Cramb and his



wife have died from the effects of the poison, after great suffering. An official inquiry has been held during the past week, and is now all but completed. It was at first believed that the sugar which had been used had come from the Continent, but subsequent inquiry revealed that that was not so, and that, in point of fact, it had been refined in a Greenock refinery. The affair was placed in the hands of two police officers, one belonging to Glasgow and the other to Greenock, and those gentlemen have handed in their report. The fact has leaked out, however, that the refiners of this particular consignment of sugar are not to blame for the condition in which it was found by retail customers, and that they are exonerated from any suspicion of using risky quantities of any ingredients in the process of refining that might prove deleterious to health. The police are very reticent about the matter pending the report of the commission of inquiry. We hear that a cask of weed-killer, which was in the same van as the sugar, leaked and the liquid got to the sugar.

**CARBOLIC-ACID POISONINGS.**—An inquest has been held at Battersca, on Joseph Burgess, aged 47, late a stone carver, residing at 13 St. Philip's Cottages, Queen's Road, who committed suicide by taking carbolic acid on April 6. Mrs. Rosina Jane Burgess deposed that her husband had been out of work for a considerable time, and had recently had some trouble with regard to his son. Deceased was discovered sitting in an outhouse in the back yard with a glass and a bottle containing about a pint of carbolic acid lying by his side. He was groaning and foaming at the mouth. A doctor was sent for, who applied the stomach pump, but without result. The doctor said deceased must have taken half a tumblerful of the liquid. The coroner said that he thought carbolic acid should be included in the schedule of poisons, as otherwise it was very easy for persons with suicidal intentions to obtain it. The Privy Council up to now thought it would be prohibiting the use of a good disinfectant. The jury returned a verdict of "Suicide whilst temporarily insane."—Early on Sunday morning a man was found lying in Gargett's Gardens, Sunderland, apparently asleep, with a bottle labelled poison and which contained a small quantity of carbolic acid, by his side. Dr. Burns, the police-surgeon, applied the usual remedies, and ordered the man's removal to the workhouse, where he died an hour after admittance. The deceased, who was about 45 years of age, was very respectably dressed. In one of his pockets was found a railway-ticket from Edinburgh to Portobello, which bore no date. Dr. Burns said that death arose from carbolic acid poisoning and exposure.

**RECRUDESCENT INFLUENZA.**—The evidence which is accumulating as to the reappearance of influenza in our country is not of a very reassuring character. Disquieting intelligence of the ravages of the malady in American cities has for some little time been coming over to us, the disease only a few days back having been accredited with the proportions of an epidemic in New York. Now, however, England has been again invaded, and this, too, in more than one locality. In London there has been but one week since February ended in which influenza has not been certified as the direct cause of death, seventeen deaths having been returned during this period as primarily due to the disease, seven in the week ended April 4, and three in the course of last week. At the same time, diseases of the respiratory organs have claimed numbers which, if not greatly, were at any rate somewhat, in excess of the corrected weekly averages. But the matter has not ceased with the Metropolis. Hull has been hit, and Birmingham, Sheffield, and Market Rasen have all of them suffered. At Sheffield, indeed, the character of the malady is such as to have earned for it the name of "Russian influenza"; while in Birmingham school attendance has been greatly diminished and much suffering inflicted among factory workers and shop assistants. Yorkshire, however, seems to be the county chiefly affected, many of its town and villages having been invaded, and perhaps most hardly of all the district of Driffield and its surroundings, where trade is seriously interrupted and many deaths have occurred as a consequence of the extensive prevalence of the malady, persons attacked last year being again, in some cases, victims to the complaint. In several towns in Scotland the complaint has also appeared again.

## FRENCH PHARMACEUTICAL NEWS.

(From our Paris Correspondent.)

**SUPPRESSION OF QUACKERY.**—The Prefect of Police has ordered the suppression of the quack dentists, dealers in medicine, &c., who frequent the numerous fairs held during the summer in the neighbourhood of Paris. The purging process has commenced with the Gingerbread Fair, now going on at Vincennes.

**DENTISTS PROTEST.**—The members of the General Association of French Dentists held a meeting at the Dental Hospital, Rue Rochecouart, last Wednesday, at which several speakers commented strongly on the terms of the recent law concerning the Practice of Medicine. General regret was expressed that the commission of the Chamber of Deputies had declined to receive a delegation of members of the association. It was decided to memorialise the Senate and to draw attention to the services rendered by the Dental Hospital.

**FRENCH EXPORT TRADE.**—The Defence Committee of French Exportation held an important meeting last Saturday in the Hall of the Syndical Chambers, Rue de Lanery. Upwards of sixty syndicates were represented. A former Minister of Commerce, M. Locroy, was elected president of the meeting. The question of the new tariffs was the subject of discussion. On the proposition of one of the members, the meeting voted unanimously the opinion that, should the proposed tariffs be adopted, they would inevitably lead to the downfall of France and to her isolation from other nations.

**PHENOMENA OF FERMENTATION.**—In a communication to the Academy of Sciences, Mr. Lendet states that the higher alcohols are not produced by the action of yeast, but by microbes, which exist, and this frequently in large quantities, quite independently of the ferment. In fact, in working sugar or maltose more of the best alcohol is produced when only a small quantity of yeast is used. If, on the contrary, yeast is freely employed, the alcoholic fermentation is vigorous, at least at first. There is less waste or impurity with a steady and regular fermentation, such, for instance, as when bruised malt is added to the fermenting liquid.

**PARASITICAL PLANTS.**—Mr. Chatin stated, at the last meeting of the Academy of Sciences, that these classes of plants seriously affect the sap of the trees, &c., on which they exist, destroying certain elements and, on the other hand, producing new ones. For instance, no strychnine is found in the "loranthin" grown on the *Strychnos Nuxvomica*, no quinine in the "botanaphora" of the cinchona; and in oak mistletoe, green instead of blue tannin is found. On the other hand, substances are found in parasites which do not exist in the trees on which they are found. Thus, mistletoe contains lime, and the dodder produces yellow and red colouring matters. In the broom-rape of hemp and milfoil a blue colour is found; in that of "hippocrepis," a rich sulphur tint, and an amethyst shade in the broom-rape of thyme. The mistletoe and most parasites contain fecula which penetrates to the fibres of the wood. In short, all these matters are formed by the parasitical plants themselves.

**FREE MEDICINE AS A BID TO CONVERSION.**—The whole of the population of the village of Monteynard, near Grenoble, has seceded from the Romish Church and embraced Protestantism under peculiar circumstances. The parish priest was extremely popular with the members of his flock, owing to the fact that, having studied medicine in his younger days, he readily supplemented his theological teaching by some gratuitous practice of the healing art, often supplying his poorer parishioners with medicine also free. Unfortunately the reverend gentleman had, in other respects, fallen away from the path of virtue. For this moral delinquency he was removed. But on the arrival of his successor the population turned out and received him with volleys of stones. As a protest against the dismissal of the offending abbé, they have embraced Protestantism and have petitioned the Prefect of the Department for permission to use a schoolroom for Divine Service.



THE ACADEMY OF SCIENCES.—At the last meeting of the Academy M. Berthelot, the well-known chemist, was the object of special attention, it being the fortieth anniversary of his career as a professor. The learned perpetual secretary of the Academy was nominated, at the age of 23, to the post of Assistant Professor of Chemistry at the College of France. In course of the meeting M. Berthelot read a paper giving the result of researches by M. Henri Moissan on iodide of boron. This body, which is said not to have been obtained before, may be prepared under different circumstances, but especially by the action of gaseous hydriodic acid on the amorphous boron of Messrs. Deville and Wöhler. The substance obtained is hygroscopic, well crystallised, and colourless. It melts at 43.5°, and boils at 210°. On being brought into contact with water, it produces a similar noise to that caused by a red hot iron and yields boric acid and hydriodic acid.

### CANADIAN NOTES.

BRITISH COLUMBIA PHARMACISTS are in hopes that they will get their Pharmacy Bill through this time. It is making good progress in the Legislature.

MR. W. W. MAYES, of E. Hooper & Co.'s, Toronto, was, on the occasion of his leaving the firm to start business, entertained by his friends last month, and was presented with a fine diamond ring.

SOME VERY SERIOUS FIRES have recently occurred. Dr. E. S. Wilson, of Brechin, Ontario, has been entirely burnt out. Mr. A. M. Herring, a New Westminster, B.C., druggist, had a fire which completely destroyed his stock, valued at \$25,000. Upon this he had \$12,000 of insurance.

A REMARKABLE PHASE IN PHARMACY is shown in Ontario by the application of two individuals to the Legislature asking that special Acts be passed to permit them to practise pharmacy, in one case at Tottenham, in the other at Markham. Why these gentlemen have taken this round-about and expensive process can be conjectured.

NOVA SCOTIA PHARMACY has extended the hand of fellowship to medicine. The lecturer on pharmacy to the Pharmaceutical Council is to be a member of the Halifax Medical College Examining Board. The object of this is to make the college graduates eligible to become members of the Pharmaceutical Society without further examination. This does not mean that doctors cannot keep open shop; they do very largely, but the new arrangement will help to make medical men more friendly to pharmacists. Less than a dozen new pharmacists are placed on the register of Nova Scotia yearly.

FERTILISERS.—In a recent report from the Laboratory of the Inland Revenue Department, Ottawa, particulars are given of fifty-six samples of different kinds of fertilisers, which the Laboratory has examined for farmers and others. Only two or three samples were of English origin, the bulk being Canadian, with some American. The fact is that there is comparatively little demand for fertilisers in Canada. The Inland Revenue Department has recently attempted to ascertain the extent of the fertiliser trade in Canada, but the returns obtained were incomplete, and can only serve as the foundation for an approximate estimate. The latter cannot be placed higher than 3,400 tons, which was the probable quantity of fertilisers sold in the Dominion last year. From this it appears that the trade is as yet in its infancy, and that "high farming" is still unknown in Canada. The prices are, on the whole, lower than in the United States, where at least a million tons are made use of annually. Canadian farmers seem to entertain a prejudice against the use of fertilisers, owing to the apparent high prices charged for them. Accordingly, Mr. Thomas Macfarlane, the chief analyst, in his report to the department, advances explanations as to the properties of artificial fertilisers, and the economy of their use along with farm manure.

CALIFORNIA in 1890 disposed of 15,000,000 pounds of borax and 23,000 flasks of mercury, the total value of both being about 500,000.



AT the Newton County Court on April 10, before his Honour Judge Edge, the Council of the Pharma-

ceutical Society of Great Britain sued Alfred Ponsford, of Newton, for the amount of penalties incurred by him on February 14 and 17 for selling poison—to wit, tincture of opium; and also for keeping open his shop and exhibiting the name or title of a chemist. The amount claimed was 20s., being 5s. for each offence. Mr. Flux, solicitor, London, appeared on behalf of the Society. The defendant, in answer to his Honour, admitted being liable, having offended in all the cases. He said the business was his father's, and he had endeavoured to pass the examination. Mr. Flux said the defendant had been previously summoned in 1889, but previous to the case coming on he paid the amount. His Honour said it seemed to him that he had no discretion about the penalties. Mr. Flux said the Society had no option but to act. The defendant: It is a very hard case. His Honour: I cannot help that. The defendant said he did not see why he should be summoned for two occasions in the same month when one was sufficient for the plaintiff's case. His Honour: Because you have transgressed the Act daily. Mr. Flux: It is a question of the safety of the public. His Honour said so far as the defendant might be concerned it was quite possible that the public might not be endangered; but if he was at liberty to sell poisons, other persons might claim the right also, and simply say in their opinion they were competent to do it. That would not do; it was not the law. The defendant: It is my misfortune, not my fault. I have endeavoured to pass. His Honour: Until you have conformed with the law you must not dispense poisons. I have no alternative but to give a verdict for the plaintiffs for the 20s. claimed, with costs. Mr. Flux said he had to bring there a witness to prove the purchase, and an analyst to prove that they were poisons. His Honour said these costs would be allowed with advocate's fees. He hoped the defendant would try to pass the examination or cease selling these things, because the Society would continually sue him—and very properly. Mr. Flux said the first communication the defendant had from the Society was in 1884. His Honour: And he has been violating the statute ever since. The defendant: I have made three attempts, and I have passed one examination. His Honour: Attempts to pass examinations do not qualify men. I made attempts to pass examinations, and succeeded, or I should not have been here. Many of us have to undergo examinations. I am very sorry indeed for you.

### A MINCING LANE CASE.

IN the Queen's Bench Division, London, on Thursday, the cases of Glyn, Mills, Currie & Co. v. Seaward Brothers and Cole & Co. v. Seaward Brothers came before Mr. Justice Wills and a special jury. On the first case being called on, Mr. Finlay, Q.C., rose and said he was happy to be able to inform his lordship that in this, as well as in the following, case the parties had been able to arrive at an arrangement. He therefore asked his lordship to enter judgment in accordance with the terms of that agreement, which would be handed in to the officer of the court. His lordship accordingly gave judgment in accordance with the terms agreed upon. The terms were not stated publicly.



## THE "MOONSEED BITTERS" AGREEMENT.

AT the Oxford County Court on April 1, before his Honour Judge Snagge and a jury, the case of Deacon v. Kirby, remitted from the High Court, was tried. Mr. Vachell, instructed by Messrs. Bradford & Co., Swindon, appeared for the plaintiff, and Mr. Nash represented the defendant.

In opening the case, Mr. Vachell explained that the plaintiff, Mr. Hubert John Deacon, was a jeweller, of Swindon, and the defendant, Mr. Samuel Kirby, a grocer, of Abingdon. The action was brought on a bill of exchange for 92*l.* 3*s.* 6*d.*, dated August 23, 1890, payable three months after date. From the defence delivered in the proceedings of the High Court, it appeared that Kirby admitted the acceptance of the bill of exchange, but put the plaintiff to the proof of its acceptance and its time of maturity. Defendant urged that if this bill had been accepted it had been accepted and delivered to the plaintiff as security for the amount of the sales, subsequent to such acceptance, of certain Moonseed Bitters deposited by one Powell with the defendant for sale; and, further, that it was delivered on the terms that it should not be presented for payment, but that Deacon should hold the bill, and that it should be used as security against the goods deposited by Powell with Kirby. Counsel here exhibited a bottle of Moonseed Bitters, which, he observed, appeared to be good for all sorts of complaints. A parcel of Moonseed Bitters was sent by Powell to Kirby, and defendant gave Mr. Powell a bill of exchange, dated April 8, 1890, for 100*l.* The arrangement between Powell and defendant would have been:—"You take this parcel of goods; you don't pay for them now, but give me a bill of exchange for 100*l.*, and when that bill matures or is maturing you render to me an account of the Moonseed Bitters that you have sold, and then send me the money representing them, less a certain commission for yourself; then there shall be another bill, and we shall go on again." That was the arrangement between Powell and Kirby. Powell brought the bill to his client (Mr. Deacon), who had had certain financial dealings with Mr. Powell. His (counsel's) contention was that the bill came into plaintiff's hands perfectly innocently, and he had not the slightest idea of any such arrangement as he had named. Consequently when the bill matured, and was paid into the bank, there were no funds. A correspondence thereupon ensued between the parties' solicitors, and a second bill for 92*l.* 3*s.* 6*d.*, which formed the subject of these proceedings, was given. It was contended, as a result of that correspondence, that Mr. Deacon was practically willing to put himself into the shoes, if counsel might say so, of Mr. Powell, and "take on" this arrangement. There was not, however, the slightest shadow of a ground for saying that Mr. Deacon ever made any such arrangement in reference to the bill on which plaintiff was now suing.

Plaintiff was then called. He produced the bill of exchange, which had not been paid.

In cross-examination by Mr. Nash, the plaintiff said he had discounted about a dozen bills for Mr. Powell, who was the maker of Moonseed Bitters. He had brought a similar action against Manning under a similar bill, which was one of the bills that he discounted for Powell. He had partly "financed" Powell. Mr. Morse had also financed him, as had also a Mr. Butterwell, of Swindon. He had no agreement with Mr. Powell as to the Moonseed Bitters. He was entirely in the dark as to what was going on between Kirby and Powell. He had no interest whatever in Powell's business. He remembered new machinery being put up in Powell's factory at Swindon. He was not constantly at the factory before the bill was given, but after it was given he went frequently. He did not know that his money went for the purpose of Mr. Powell putting in his machinery. He did not know where Powell was, but he believed he had been subpoenaed.

The registrar said the subpoena had been returned.

Plaintiff, in further cross-examination, said he had given Powell an acceptance for 200*l.*, and the latter gave him the bill for 100*l.* as part payment. He did not know Kirby was agent for the bitters.

A correspondence was put in with the object of showing that the defendant only gave the bill on the undertaking that it would not be presented unless the goods were sold, and that Deacon said he was willing to hold the bill and not

present it if defendant would give notice and send cheque for the amount of medicine sold.

Defendant was called to bear out this statement, and

Mr. Nash, addressing the jury for the defence, said he did not think he should be using exaggerated language if he characterised this transaction as a fraud and a swindle. They had had exposed an ingenious contrivance for turning an honest penny. This was the way in which it was done: "If you have got some patent medicines to sell go to an unsuspecting tradesman in Abingdon, induce him to become your agent at 25 per cent. commission, 'land' him with 100*l.* worth of your patent medicines, and induce him to give you a bill for the value of these goods, promise him faithfully that you will not put that bill into circulation and you will not present it, break your promise, discount it with some friend of yours, and let the gentleman to whom the bill is passed sue the unsuspecting tradesman at Abingdon for the full value of the bill, and the result is this: You have succeeded in selling, by what they call a quick sale, 100*l.* worth of your patent medicines which might take years otherwise to dispose of, and you have left the unsuspecting tradesman of Abingdon a sadder but wiser man." That was the simple transaction.

Mr. Vachell urged on behalf of the plaintiff that this was a straightforward transaction, and contended that the bill had been "duly accepted."

His Honour summed up the case at length, and said the questions for the jury to decide were—(1) Was Deacon the *bona fide* holder for value of the 100*l.* (original) bill, and did he acquire that bill for value without notice that it was not intended to be negotiated or presented, but was to be held only as security; and (2) if so, was the bill for 92*l.* odd which was now sued upon given by Kirby upon any condition that it should be held by Deacon only as security, and should not be presented.

The jury retired to consider their decision, and on returning into court gave a negative reply to the first question and an affirmative reply to the second.

Mr. Nash asked for judgment, upon which Mr. Vachell rose and submitted that there was no evidence really to go to the jury on the first point. Eventually his Honour gave judgment for the defendant with costs.

## INACCURATE DISPENSING AT CO-OPERATIVE STORES.

AT Dublin on April 10, the case of Gray v. the Junior Army and Navy Stores (Limited) was concluded. The action was brought by Mr. William Gray, a retired superintendent of customs, now residing at Tritonville Road, Sandymount, to recover damages from the Junior Army and Navy Stores (Limited), at whose establishment in October last a prescription of Dr. Kendal Franks was compounded for Mr. Gray's use. The statement of claim in the action charged that the defendants had been negligent in the compounding, and that thereby the mixture compounded and supplied was poisonous, and that when taken by the plaintiff it nearly caused his death. There was no statement of defence, and the plaintiff having for default of such marked the usual interlocutory judgment, proceeded to assess his damages, the amount claimed in the action being 500*l.* Dr. Houston, Q.C., and Messrs. J. A. Rynd and Charles Yates (instructed by Mr. Wm. Robinson) appeared for the plaintiff; Messrs. G. O'Malley, Q.C., and Molyneux Barton (instructed by Mr. J. M. Williamson) for the defendants.

The prescription in question was given by Dr. Franks in July. It was intended to have a composing effect, as Mr. Gray at the time was suffering from nervousness and loss of sleep, brought about by domestic affliction. The principal ingredient in the prescription was spirits of sal volatile, or, as it is chemically known, aromatic spirit of ammonia.

Mr. Gray, the plaintiff, who is 76 years of age, was examined, and stated that he had in July last used the mixture as compounded for him at the stores with good effect: and again on a subsequent occasion had obtained and used a further bottle of it. On October 20, having occasion for another bottle of it, he got it compounded at the stores, and when, at his residence late at night, he took the usual dose of it, he felt himself immediately burnt inside and almost choked. He suffered intensely all through the night, and



next day he saw Dr. Franks, who, upon sipping the mixture, had immediately to eject it from his mouth, and said the ammonia it contained was out of all proportion. For about a fortnight Mr. Gray was unable to take ordinary solid food, and his throat, which had never before been delicate, had ever since, from the effects, been in a bad state and requiring treatment.

Dr. Kendal Franks was examined, and it appeared he had for many years been attending members of the plaintiff's family, but not the plaintiff himself until July last. He stated the circumstances under which the prescription then was given, and what occurred in interviews on October 21, October 27, and March 18 last. Although he noticed the state of plaintiff's throat, it did not strike him that it was produced by the mixture. Mr. Gray's tongue had blisters on it, and the liquid which produced these blisters on the tongue would, if swallowed, affect the gullet in the same way.

Miss Caroline Gray, one of the daughters of the plaintiff, deposed to what occurred at the time her father took the dose in October, and how it deprived him of the power of speaking and nearly suffocated him, and also gave evidence of his previous remarkably strong throat and constitution.

Dr. George M. Foy was next examined, and proved the effects seen by the laryngoscope in Mr. Gray's throat. He was of opinion, from the result of his inspection, and from the evidence given by other witnesses, that Mr. Gray had suffered severely from swallowing a solution of the caustic alkali known as solution of ammonia. The bottle containing the residue of the mixture having been brought to the store by Dr. Franks, and not being now forthcoming, he had to conclude that it contained a large excess of ammonia, and did not contain the mucilage which should have been in it. He was further of opinion—agreeing in this with the paper by Dr. Kendal Franks on treatment of stricture of the œsophagus—that although the inflammatory state of the gullet had apparently subsided in a few days after the taking of the dose that stricture should eventually supervene, and he described the effects and the difficulty of treating such a development.

Dr. Powell was also examined. He had seen the plaintiff in March, and had found him suffering from the results of previous acute inflammation, which he believed to have been caused by the swallowing of the corrosive fluid. He agreed with the evidence of Dr. Foy.

Evidence having been heard for the defendants, the jury, after a short deliberation, assessed the damages at 200*l*.

#### MESSES. COLMAN'S TRADE MARKS.

ON Saturday, April 11, in the Chancery Division of the High Court, before Mr. Justice Kekewich, an application was made in this case which, it was stated, was of the greatest importance to persons interested in trade-marks, as the difficulty or doubt which occasioned it extended to a very large class of cases. In a recent decision of the Court of Appeal, in reference to the Apollinaris Company's trade marks, some remarks had been made by the Lord Justice Fry tending to show that where the words "trade mark" were contained in a label or other mark in such a manner as to appear to refer to a particular part of the mark as being the essential part the registered owner may lose protection for the mark as a whole. The present applicants had various labels on the register, which contained the words "trade-mark." In one of them, the words were used in close proximity to a "hull's head," and it was feared, in view of the language of the Lord Justice, that the effect might be that the whole label was not protected by the registration. The applicants accordingly now sought the leave of the court that the words "trade-mark" might be expunged from their labels.

The Attorney-General and Mr. Ingle Joyce, for the Comptroller of Trade-Marks, submitted that the applicants should explicitly state what they claimed as the essential parts of their trade-marks, and disclaim all right to any added matter. The words "trade-mark" as used upon the labels in effect informed the public that a certain part of the label was regarded as essential, and if those words were removed it was only right that something should be put on record which would inform the public which parts of the mark they might take, and which they might not take.

Mr. Cozens-Hardy, for the applicants, submitted that no such terms ought to be imposed, as the law at the time when the registration was effected did not include any such requirement.

Mr. Justice Kekewich said that if the matter had been strongly contested on the part of the Comptroller, he would have been indisposed to allow any alteration at all. Quite apart from what the Lord Justice Fry had said, it appeared to be clear that the applicants had on their registered trade-mark suggested that the hull's head was one of the essential parts of their mark, and his lordship thought they had done more—they had in effect stated that the hull's head was that without which the trade-mark was not, and that the other essential parts by themselves would not give them sufficient protection. It appeared to him that the suggestion of the Attorney-General was required to meet the justice of the case. The order would be that the application be granted on the undertaking of the applicants to endorse on their application and enter on the register a statement of the essential particulars of each mark, and a disclaimer of the exclusive right to the added matter, if any, to the satisfaction of the Comptroller, with liberty to apply again to the court in reference to the matter.

#### IS A SHOPMAN A "WORKMAN"?

A CASE came before Justices Grantham and Smith on Saturday last in the Queen's Bench Division, in which a grocer's assistant, who had been fined 50*s* by magistrates for leaving his employment under the Masters and Servants Act, 1875, appealed against the conviction. The question in the case was whether the assistant was a workman or journeyman, or a person "otherwise engaged in manual labour" within the meaning of the Act. In the business in which the assistant was employed a porter was kept to do the outdoor heavy work, and the appellant was engaged "in the ordinary duties of a shop, principally, if not exclusively, in serving customers." It appeared from the arguments that a railway goods guard and an omnibus conductor had been ruled out of the Act, but that a "journeyman butcher" had been included in it. In this case Mr. Justice Grantham held that the assistant came within the Act, but Mr. Justice Smith considered that he was not included. The effect of this difference of opinion is that the conviction stands.

#### WARNER'S SAFE CUBE.—THE STOCK EXCHANGE OPERATIONS.

IN the Queen's Bench Division of the High Court of Justice on Monday and Tuesday, the case of Salaman v. Warner and others came before Justices Day and Lawrence, sitting as a divisional court. Plaintiff claimed 7,250*l*. as damages for losses sustained owing to the alleged fraud, conspiracy, and wrongful acts of the defendants in connection with H. H. Warner & Co. (Limited), and the question for the decision of the court was whether upon the facts set out in the statement of claim there was any cause of action against the defendants or either of them.

Mr. Finlay, Q.C., Mr. Moulton, Q.C., Mr. Chitty, and Mr. M. C. Kenna, appeared for the plaintiff; the Attorney-General (Sir Richard Webster, Q.C.), Mr. Abraham, and Mr. G. H. Mallinson, for Mr. H. S. Foster; the Solicitor-General (Sir Edward Clarke, Q.C.), Mr. Cook, Q.C., and Mr. Lawrence for Mr. Warner; and Sir Charles Russell, Q.C., and Mr. Henry Sutton for Messrs. James and Edward F. Coates.

The plaintiff's statement of claim set out that in and prior to the year 1889 the defendant H. H. Warner carried on at Rochester, New York, a business which consisted mainly in the manufacture of certain proprietary preparations. The defendants Coates were members of the London Stock Exchange and the defendant Foster was the managing director of the London & Colonial Finance Corporation, (Limited), which was formed for the purpose of promoting joint stock companies. About November, 1889, the defendants agreed to promote a company for the purpose of acquiring the business of Mr. H. H. Warner, and a company was subsequently formed under the title of H. H. Warner & Co. (Limited), the purchase-money being 700,000*l*. in cash and shares. The plaintiff alleged that in order to increase the profits to be made by them in connection with the forma-



tion of the company, the defendants conspired together to make large purchases of shares in the company, so that they would be able to control the allotment, and to hold the bulk of the shares in their own hands so that persons who should contract to sell such shares would be unable to obtain shares to enable them to fulfil their contracts either by subscription or purchase in the open market and would be compelled to purchase such shares from the defendants at any price they might choose to fix. In order to succeed in that conspiracy it was absolutely necessary to lead the public to believe that the bulk of the shares in the company were to be offered and allotted to the public on subscription, and were not to be retained by the vendor or promoters. Accordingly it was stated in the prospectus by the defendants that the whole of the shares and debentures (other than one-third, which formed part of the purchase consideration) were offered for public subscription at par. It was also stated that it was intended to apply for a Stock Exchange quotation in due course. The plaintiff, on the faith of the statements in the prospectus, was induced to believe that the shares were actually offered for public subscription, and would be allotted to them on application. The defendants then proceeded to make, through their brokers, large purchases of shares in the market, knowing at the time that it would be impossible for those selling to perform their contracts. By reason of the deceits practised by the defendants, the public were wholly unaware that the bulk of the shares had been allotted to the defendants, and were in the belief that the directors would allot the same in accordance with the statements in the prospectus. The defendants were, the plaintiff alleged, thus able to compel a person who had contracted to sell shares in the company to purchase such shares from defendants at such prices as they might choose to fix. It was further stated that the defendants caused a settling-day to be applied for, and that in order to procure the same they caused a false and fraudulent statement to be made to the committee of the Stock Exchange as to the number of shares allotted to the public. The plaintiff was one of the persons who was induced to make contracts for the sale of shares prior to settling-day; but in consequence of what the defendants had done he was unable to complete the contracts, and was obliged to purchase shares at exaggerated prices.

The main defence in the action was one filed by Messrs. Coates who denied conspiracy or fraud, and said they were parties to the issuing of the prospectus as brokers to the company. They admitted that the granting of a Stock Exchange quotation depended upon at least two-thirds of the shares being *bonâ fide* allotted to the public, and this they stated was done. They further said that the company was promoted and the shares allotted in a proper manner, and without any intention to defraud or injure the plaintiff. They denied that a settling-day was obtained by means of false or fraudulent representations, or that the plaintiff entered into contracts for the sale of shares through any representations made by them. Further, that such contracts were not *bonâ fide* contracts for the sale of shares, but were made in respect of shares which the plaintiff never possessed, and which he never intended to acquire. They contended that the contracts were in effect gaming or wagering transactions, and wholly illegal, and were entered into by the plaintiff for the purpose of a scheme formed by him to depreciate the value of the shares in the company, and to defraud the holders by pretending to make large sales of shares at prices far below their real value. The defendants, therefore, contended that the plaintiff ought not to be allowed to maintain the action.

Their lordships, after a lengthy hearing, decided that none of the legal rights of the plaintiff had been infringed, and they could not come to the conclusion that he had shown any cause of action.

Judgment accordingly.

#### ELECTRIC SUPPLY.—AN ACTION BY SAVORY & MOORE.

MR. JUSTICE KEREWICH, sitting in the Chancery Division of the High Court of Justice, on Wednesday, resumed the hearing of the action brought by Messrs. Savory & Moore, wholesale, dispensing, and manufacturing chemists, who carry on their business in Bond Street, for an injunction to restrain the London Electric Supply Corporation (Limited)

from so carrying on their business as to be a nuisance, the nuisance in question being the danger from fire to the plaintiffs' premises, where a large quantity of inflammable drugs and other goods were stored, in consequence of the high-pressure system, amounting sometimes to as much as 10,000 volts, used by the defendants.

Mr. C. M. Warmington, Q.C., and Mr. Vernon Smith were counsel for the plaintiffs; and Mr. Fletcher Moulton, Q.C., and Mr. Hamilton represented the London Electric Supply Corporation (Limited).

The plaintiffs' case, in support of which considerable evidence was called, was that in consequence of the use of the high-pressure system there was great danger from fire at the defendants' distributing centre in the Grosvenor Mews, where they received large supplies of electricity, sent to them from their generating station at Deptford. It was stated that a number of accidents had already occurred, and that there had been at least one serious fire on the defendants' premises. The London Electric Supply Corporation retorted that when the accidents and fire occurred their property was only temporarily fitted up, and that now the chamber in which the electricity was received had been made entirely fireproof, so that under no circumstances could a fire take place again. It was, said the defendants, to their interest to make their distributing stations as safe as possible, and they had used every endeavour to do so.

His lordship, in the result, intimated his intention of allowing the action to stand over for three months, with a view to seeing whether the defendants would take extra precautions to prevent any danger from fire or otherwise arising from the upper portions of their building, which he did not consider at the present time were entirely fireproof.

#### BANKRUPTCY REPORT.

*Re* JOHN HENRY THOMAS, Chester, chemist and druggist.

At the Chester Castle, on March 26, before His Honour, Sir Horatio Lloyd, Mr. E. S. Giles made an application for the discharge of John Henry Thomas, lately trading with Thomas Williams, under the title of Grindley & Son, chemists, Northgate Street. Mr. W. T. Rogers, solicitor, appeared to consent to the application on behalf of the trustee. No creditors appeared. The Assistant Official Receiver having pointed out that the dividend paid had exceeded the debtor's original estimate, His Honour granted the order of discharge, subject to a nominal suspension of one day.

#### Gazette.

##### PARTNERSHIPS DISSOLVED.

Chapman & Pain, Ipswich, pharmaceutical chemists.

Hart, H. B. & E. L., Mincing Lane, City, colonial brokers and commission merchants.

Houghton & Smith, Blackburn, aerated-water manufacturers.

McDonald & Skelton, Eastwood, oil and colour merchants and mineral-water manufacturers.

##### THE BANKRUPTCY ACTS, 1883 AND 1890.

###### RECEIVING ORDERS.

Crapp, A., Stanmore, veterinary surgeon.

Edlin, Edward Holberton, Plymouth and Tamerton Folliott, surgeon.

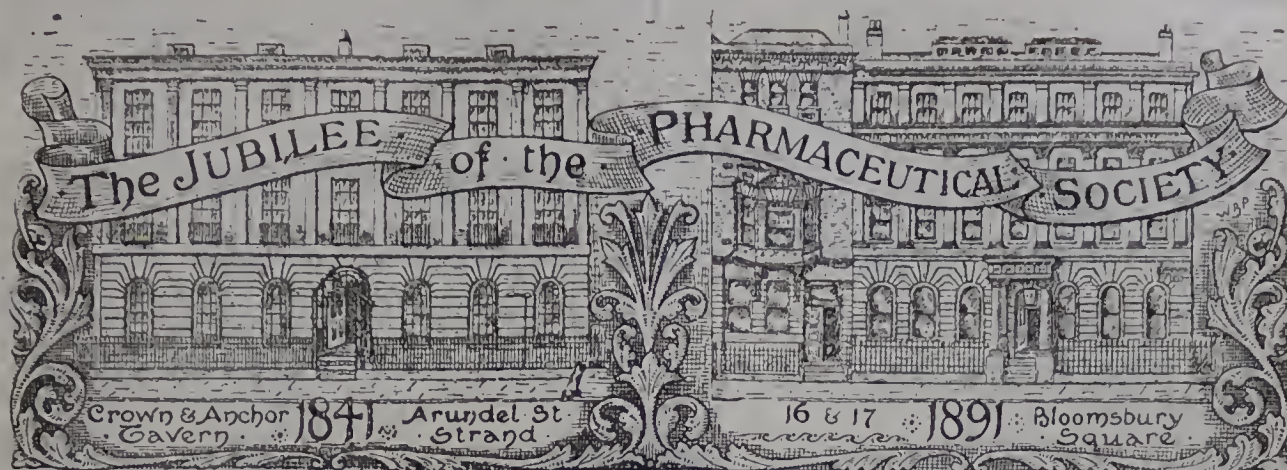
Esler, Robert, Queen's Road, Peckham, surgeon.

White, William Stokoe, Moss Side and Manchester, chemist's assistant.

##### ORDER MADE ON APPLICATION FOR DISCHARGE.

Dixon, Cecil Bernardino, Southampton, and Dixon, Sara, late of St. Raphael, France, now of Southfields, Wandsworth, trading as Dixon & Cirdus, Southampton, oil-cake and artificial manure manufacturers unconditional order of discharge granted.





It was on February 15, 1841, that a "large and influential public meeting of chemists and druggists" was held at the Crown and Anchor Tavern, in the Strand, to consider the Medical Bill which Mr. Benjamin Hawes, the member for Lambeth, was then trying to pass through Parliament, and which was regarded by the chemists and druggists of that day as so seriously inimical to their interests. It was in consequence of their association in opposition to that Bill that these chemists and druggists met again at the Crown and Anchor on April 15, 1841, and resolved, among other things—

*That for the purpose of protecting the permanent interests, and increasing the respectability of chemists and druggists, an Association be now formed under the title of the*

#### PHARMACEUTICAL SOCIETY OF GREAT BRITAIN.

William Allen, F.R.S., moved that resolution, and John Bell seconded it. At the same meeting a committee was appointed "to frame laws and regulations for the government of the Society." The names of that committee have often been quoted before, but must be given again. They were:—

Allen, William, F.R.S., Plough Court	Horner, Edward, 20 Bucklersbury
Alsop, Robert, 15 Sloane Square	Hudson, William B., 27 Haymarket
Barron, Charles, 6 Giltspur Street	Ince, William, 31 Southampton Street, Covent Garden
Barry, John T., Plough Court	Keating, Thomas, 79 St. Paul's Churchyard
Battley, Richard, 32 Lower Whitecross Street	Lescher, J. S., 4 Cripplegate Buildings
Baxter, George, 144 High Holborn	Lowe, William, 47 Blackfriars Road
Bell, Jacob, 338 Oxford Street	Mayhew, Samuel M., Camberwell Green
Briggs, Edwin, 48 Wigmore Street	Morson, Thomas, 19 Southampton Row
Butler, Thomas, 4 Cheapside	Payne, C. J., 5 St. Martin's Court
Davy, Charles, 100 Upper Thames Street	Pound, Matthew, 193 Oxford Street
De Castro, Samuel, 25 Great St. George's Place, Knightsbridge	Pigeon, Richard Hotham, 31 Throgmorton Street
Dinneford, Charles, 172 New Bond Street	Savory, John, 143 Bond Street
Ellis, John, 225 Upper Thames Street	Simkin, Edward, 2 New Cavendish Street
Farmer, Robert A., 40 Westminster Road	Smith, Joseph, 29 Haymarket
Foulger, Samuel, 133 Ratcliffe Highway	Smith, Geo. W., 125 Lower Thames Street
Gifford, Joseph, 104 Strand	Squire, Peter, 277 Oxford Street
Green, Samuel, 1 Harleyford Place, Kennington	Stamper, Ralph, 140 Leadenhall Street
Hanbury, Daniel B., Plough Court	Toller, John, 18 Conduit Street
Herring, Thomas, 40 Aldersgate Street	Walker, Thomas, 43 Tooley Street
	Wagh, George, 177 Regent Street
	Winstanley, Edward, 7 Poultry

Nearly 100 members associated themselves that day to form the body whose fiftieth anniversary has now come round. Of the forty whose names are quoted above, only two, we think—Mr. Edward Horner and Mr. Joseph Sidney Lescher—

survive. Some thirty out of the forty businesses represented on the list remain, though with many personal or local modifications. The names of Allen, Bell, and Dinneford are still associated with their respective businesses, on the same spots where they themselves once reigned, but they are now represented by strangers. Direct descendants fill the places of Barron, Hanbury, Herring, Morson, Savory, and Squire. About a third of the group were wholesale druggists. Of these the firms with which Charles Barron, Richard Battley, and Thomas Herring were connected alone remain at the same address as that which they gave on the evening of April 15, 1841.

Mr. G. W. Smith and Mr. Farmer were appointed secretaries, and a sub-committee was nominated to frame laws and an organisation. Five thousand reports were sent out to chemists and druggists all over the kingdom, though it is difficult to understand how at that time, when anyone who pleased could call himself a chemist and druggist, such a number of suitable persons could have been discovered and invited to join the new Society. An informal meeting of chemists and druggists was held at Mr. Bell's house on May 11, and the first meeting of the Society was convened at the Crown and Anchor on June 1, 1841, and at this it was arranged that the committee should act as the Council of the Society until May, 1842, after which date a Council of twenty-one members was to be elected. The Council then drafted, and in July issued, 5,000 copies of an address report, indicating progress and indicating their objects and intentions. In July, 1841, Jacob Bell tentatively established the *Pharmaceutical Journal*, and, just before the year ended, the premises in Bloomsbury Square were taken for the purposes of the Society at a rental of 240*l.* a year. Courses of lectures were commenced in 1842, Dr. A. T. Thomson, as professor of botany, opening his session in May; while Dr. Pereira began to lecture on materia medica, Mr. Fownes on chemistry, and Mr. Redwood on pharmacy in the following October. The first examinations were held in July, 1842.

#### JACOB BELL.

It is abundantly evident from this concise narration of the principal events occurring within the first year or year and a half of the Society's existence that someone of unusual energy and ability was organising and establishing the institution. The more closely the history of the origin of the Pharmaceutical Society is examined, the more evident appears the preponderating share of the labour undertaken by Mr. Jacob Bell. Chemists and druggists have never had a more brilliant nor a safer friend.

Wealthy, accomplished, and popular in the best social circles, Mr. Bell had no pecuniary objects to gain by his work on behalf of the trade with which he was connected. On



the contrary, his was one of the half-dozen establishments which profited by the general indefiniteness of the term "chemist and druggist." Fastidious customers, not knowing whom to rely upon in the country, obtained their medicines from one of those shops in London which had acquired a special reputation. It may be that Mr. Bell was ambitious of an honourable fame. He saw a piece of work to do, and he did it with his might. Very likely the recent formation of the Chemical Society suggested the idea of a Pharmaceutical Society to his mind. The London chemists were just then associated in defence of their interests against Mr. Hawes's Bill, and this temporary communion furnished the opportunity. Having induced the leading London druggists to form the nucleus of an association, and started a journal with the object of explaining and advertising its aims, Mr. Bell set to work to bring in members by visiting the provinces and holding meetings of the chemists in all the centres. So handsome was the success he attained that when the first annual meeting of the Society was held in May, 1842, the accounts showed that 2 life members, 982 subscribing members (paying at that time two guineas each per annum) and 976 associates (paying one guinea each per annum), had been enrolled. There were 202 London and 780 country members, and 196 town and 780 country associates.

From his schooldays Jacob Bell was clever with his pen as well as with his pencil. He was educated chiefly at a school conducted by a member of the Society of Friends at Darlington, and there he and another lad named Ford conducted a schoolboys' magazine, which they entitled the *Bell-Ford Gazette*. After leaving school he was apprenticed in his father's establishment, and attended scientific lectures at the Royal Institution and at King's College. He also for a time took drawing lessons at Sass's school, where he made the acquaintance of men who became among the most famous artists of the century. The young chemist had a natural gift for drawing and painting, and if circumstances had led him to take up art as a profession, his industry and perseverance would have ensured his success. He was a clever horseman, too, and much enjoyed a run with the hounds, but gave up hunting at his father's request. He was about 30 years of age when he commenced the work of his life on behalf of British pharmacy. From the first he aimed at the incorporation of the trade into a legally recog-

nised body. He did not live to see his purposes accomplished, but he cleared the way for their attainment by first giving voice to the demand which was at last satisfied by the Pharmacy Act of 1868.

#### IN PARLIAMENT.

It was with the express object of obtaining such an Act as that that Mr. Bell entered Parliament in 1850. In those days seats in the House of Commons were not exactly on sale, but a long purse and carte blanche to use it were the stipulations which agents made when they were consulted. Among Mr. Bell's many accomplishments, a familiarity with politics did not figure. "He was so little versed in political affairs," wrote his biographer soon after his death, "that he actually did not know with which party his principles would lead him to associate." He appears to have decided in favour of Liberalism, when a vacancy occurred at St. Albans with a presumption, we suppose, in favour of a candidate of that colour, and after a contest with Sir R. Carden, we believe, as his Conservative opponent, Mr. Bell was elected; and St. Albans, having on that occasion filled the measure of its electoral iniquities, was disfranchised. On the ground that Mr. Bell had not himself taken part in the bribery which was proved against his agents, he was allowed to retain his seat till the end of the Parliament. He subsequently contested the representation of Great Marlow and Marylebone, but was unsuccessful at both.

He was in Parliament for about eighteen months only, and devoted himself to the task of passing a Pharmacy Bill. His hope of securing statutory sanction for a measure covering the whole trade was doomed to disappointment. The utmost Parliament would grant was protection of the titles of pharmaceu-

tical chemist and its relatives, the value of which it was recognised had been created by the Pharmaceutical Society—though Mr. Hume (the Radical) and Mr. Henley (the Tory), knowing nothing of the work which had been done, made it the subject of cheap and ungenerous sneers. Mr. Bell was bitterly disappointed at the result of his efforts, as his speeches and articles, just after the passing of his Bill, showed. He felt that he had only made a short advance towards the goal he sought to reach, and he had no thought of abandoning his enterprise. But for two or three years after the passing of the Act of 1852



JACOB BELL.

(From the Portrait painted by SIR EDWIN LANDSEER.)



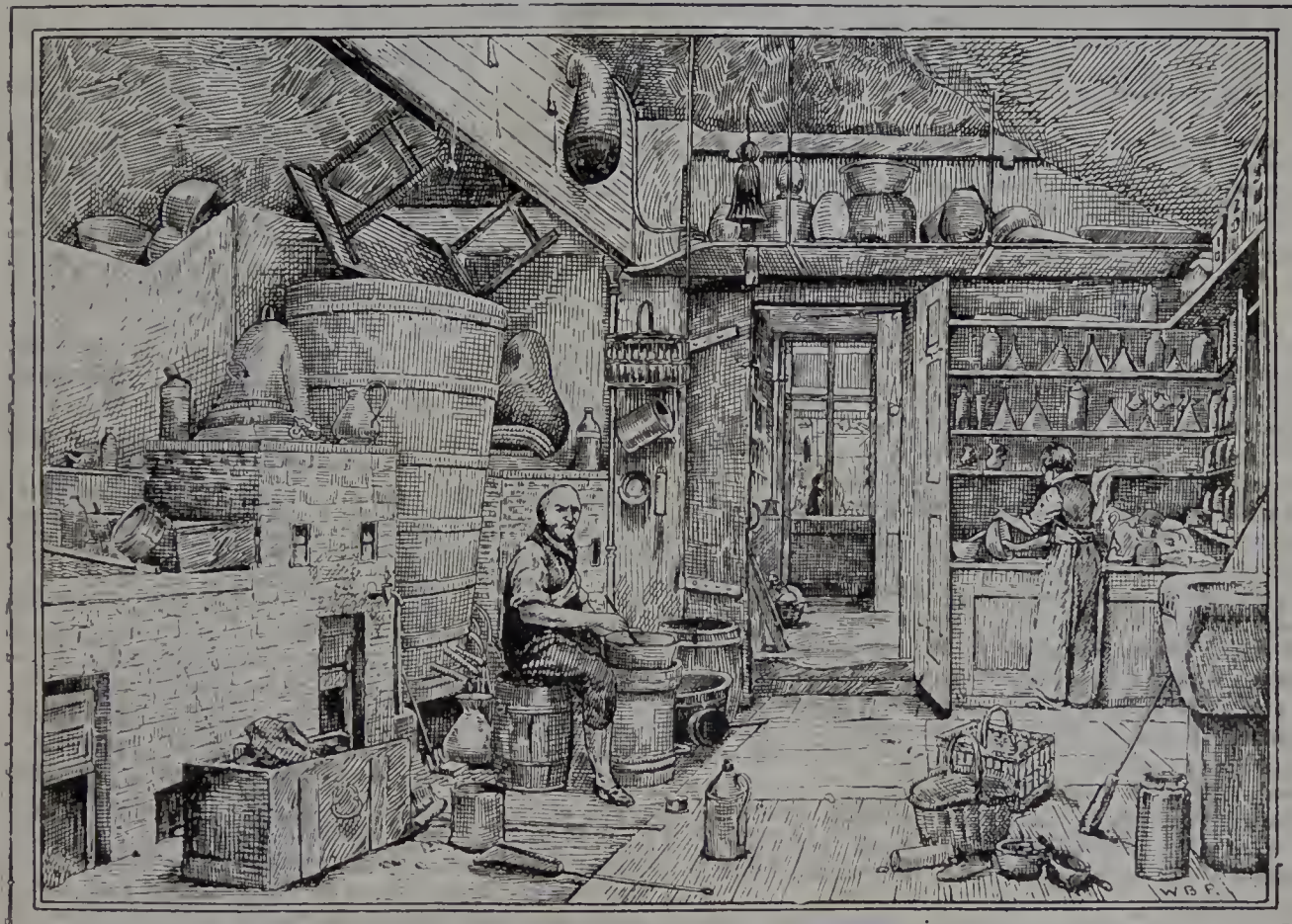
much of the energy of the Council was engaged in some stupid disputes over by-laws and the admission of members, which culminated in a lawsuit. Afterwards Mr. Bell's health began to break. He presided at the annual meeting of the Society in May, 1859, but the disease which was rapidly gaining on him—laryngeal phthisis—prevented the use of his voice. He was re-elected president on June 1, but died at Tunbridge Wells on the 12th of that month, at the early age of forty-nine.

He left to the nation a magnificent collection of paintings, including the best of Landseer's and Frith's, Rosa Bonheur's "Horse Fair," and other works, the selection of which testified to his excellent artistic judgment. To the Pharmaceutical Society he left 2,000*l.*, to be devoted as the Council should think best for the promotion of pharmaceutical edu-

centical subjects contributed to the evening meetings of the Society, and his comments on other papers read at those meetings, show that he was closely in touch with the every-day proceedings of the shop. The organisation and the direction of the affairs of the Pharmaceutical Society were, it appears, left almost entirely to him. He edited the first eighteen volumes of the *Pharmaceutical Journal*, and himself wrote a very large portion of them. And, besides all this, he seems to have had time to make himself well known and highly popular in some of the most inaccessible circles of society.

#### JACOB BELL AS A JOURNALIST.

Over the *Journal* he regularly lost something like 50*l.* a year until the last few years. When it began to be profit-



THE LABORATORY.

(From the Water-colour Drawing by W. HUNT, representing the Laboratory at John Bell & Co.'s, Oxford Street)

cation. The Council expended the greater part of this money in building and fitting new laboratories on the top of their premises in Bloomsbury Square. They also collected another 2,000*l.*, or thereabouts, with which they established the Jacob Bell Memorial Scholarships. It may be noted, as an evidence of the esteem in which Mr. Bell was held in the highest artistic and literary circles, that among the contributors to this fund appeared the names of Charles Dickens, William Makepeace Thackeray, Sir Edwin Landseer, Sir Charles Eastlake, and many other famous painters. Most of the heads of the medical profession also subscribed.

#### HIS CAPACITY FOR WORK

must have been immense. He appears to have personally superintended his business, and it is certain that he was a master of its details; his original papers on pharma-

able he made it over as a gift to the Society. His editorial articles, his answers to correspondents, and his comments on extracts, are generally as interesting and valuable now as when they were first published. In them all it is evident that his heart was in his work; that he was aiming to place British pharmacy on a level with that of the Continent. He was conciliatory to all parties, but he never hesitated to take risks when it became necessary to expose a fraud or to attack an abuse. He could hit back with effect when occasion required. His delicate sense of humour rendered all he wrote attractive.

The early volumes of the *Pharmaceutical Journal* contain frequent evidence of the objections which had to be met to the scheme of union and advancement which Mr. Bell aimed at. An effective way of dealing with these which he sometimes adopted was to print exactly contradictory



criticisms in juxtaposition. Thus, for instance, in his third number, in an article answering inquiries and objections, he quotes one man who says there would be an inducement to join the Society if it would protect chemists against grocers and oilmen; and another, who says he must decline to join if they intend to prohibit grocers and small dealers from selling drugs, as a considerable portion of his business consisted in supplying these parties.

There is or was in the Pharmaceutical Society's library a copy of Nees von Esenbeck's *Plantæ Medicinales*, a work of considerable value, and it contains on the fly-leaf, in Mr. Bell's writing, the following gently satirical inscription:—

"A member of the Council having an offer of this book at about half-price, proposed it to the Council, and it was resolved unanimously that it was desirable to secure it for the Pharmaceutical Society. It was therefore referred to the Library Committee; but in the meantime it was necessary to give an answer, which the member above mentioned did, taking the book, and waiting the final decision of the committee.

"When the committee met the book was rejected; consequently the member of Council who was saddled with it now has the pleasure of presenting it to the Pharmaceutical Society.—April, 1850."

One of the happiest essays Jacob Bell ever wrote was the

#### MEMOIR OF HIS FATHER,

which will be found at the end of the eighth volume of the *Pharmaceutical Journal*. The sketch presented of the conscientious, timid, but high-minded Quaker gentleman is perfect in its way, and leaves on record a life-history which seems to be growing rarer in these latter days. John Bell was the second son of Jacob Bell, a pious old Quaker, who was in business at Wapping with a brother-in-law as a mast-maker. When the American war broke out old Jacob Bell could not reconcile his business to his conscience. He therefore withdrew from the firm, and opened a hosier's shop, in which enterprise, however, he was less successful. John Bell served his apprenticeship with a chemist in the Haymarket. He was quite as scrupulous as his father had been. He took "the shop in Oxford Street" with much fear and trembling, and the first year he lost money. But that tender conscience of his which so often kept him back from enterprises which others would have embarked in, justified itself in the long run. From the first he resolved to sell nothing but pure medicines, and after the second year, when his reputation had become established, his business began to grow amazingly. "There was no longer any occasion," says the writer of the "Historical Sketch of Pharmacy," "for the shopboy, John Simmons, to find occupation at the back of the shop in pounding a dusting-cloth in the bell-metal mortar in order to maintain a semblance of business activity. . . ." The shopboy grew to be the laboratory man who has since been immortalised by Hunt's water-colour drawing of "The Laboratory," an outline sketch of which accompanies this notice. The drawing was made, we believe, in the time of Mr. Jacob Bell, and faithfully represents the back of the famous "shop in Oxford Street" about 1841.

In the memoir to which we have referred, Mr. Jacob Bell says his father "never solicited business, or courted the patronage of the profession; nor was he ambitious of extending his connection among the higher circles of society. To the poor he was always attentive, and it was a favourite remark with him that he often had twelve customers for a shilling." His assistants were all members of the Society of Friends, and it was his custom, as long as he had the active management of the business, to always keep his shop closed on Thursday mornings till past twelve o'clock, to allow all except one or two on duty "to attend meeting." In the

latter years of his life he became a total abstainer, in pursuance of his conscientious impulses. After he had been a teetotaler for some seven years, however, his doctors thought some stimulant was necessary for him. "For some time he was unwilling to deviate from his abstinent resolve, but Dr. Wilson, who seconded Dr. Hodgkin in this advice, suggested a plan which overcame the scruple. The wine was put up in two-ounce bottles, and sent from the shop as a medicine." *Oh! Sancta simplicitas.*

John Bell died at Wandsworth, on January 14, 1849, in the 75th year of his age. "In taking leave of his family," writes his biographer, "his only anxiety appeared to be on their account. With regard to himself he was calm and resigned, and his constitutional nervous timidity, which had been his constant companion through life, forsook him at the hour of death."

#### JACOB BELL'S PICTURES.

The sketch of Mr. Bell's life, published in the *Pharmaceutical Journal* soon after his death, was written by Daniel Hanbury, and has been reprinted in the "Science Papers," edited after Hanbury's death by Joseph Ince. It was an appreciative but by no means an exaggerated record of his career. Mr. Hanbury mentions the legacy of famous pictures which Jacob Bell left to the nation, and which are now in the National Gallery. Among these were "The Sleeping Bloodhound," "The Shoeing," "Alexander and Diogenes," "Dignity and Impudence," "The Defeat of Comus," "The Maid and the Magpie," all by Sir Edwin Landseer; "The Horse Fair," by Rosa Bonheur; "The Derby Day," by Frith; "James II. Receiving the News of the Landing of the Prince of Orange," by Ward; cattle-pieces by Lee and Cooper; and other paintings. The value of these, Mr. Hanbury remarked, had been estimated at 18,000*l.* to 20,000*l.*—a fairly cautious calculation, we should say. Ten times that figure would be nearer the estimate now.

In his "Reminiscences" Mr. W. P. Frith, R.A., tells several amusing anecdotes of Jacob Bell as an art student and an art patron. Frith and Bell were contemporaries at Sass's drawing-school, but, says Mr. Frith, "Honest old Sass could do nothing with Jacob, who completed the list of his misdeeds one day by sketching in the very centre of his drawing-lesson the scene of an execution at Newgate. Mr. Sass looked at the drawing, and went out of the studio—a pin might have been heard to drop. Bell looked round and winked at me. Sass returned, walked slowly up to Mr. Jacob Bell, and addressed him:—'Sir, Mr. Bell; sir, your father placed you under my care for the purpose of making an artist of you. I can't do it; I can make nothing of you. I should be robbing your father if I did it. You had better go, sir; such a career as this,' pointing to the man hanging, 'is a bad example to your fellow-pupils. You must leave, sir.' 'All right,' said Bell, and away he went, returning to the druggist's shop established by his father in Oxford Street, where he made a large fortune." Mr. Frith records that old John Bell, "who never quite got out of his early Quaker tendencies towards frugality," reproached his son with frittering away his money on works of art. But when the old gentleman was assured that all the pictures in Jacob's possession would bring more than they cost, and that not a few might be sold for twice the money, he reconsidered his hasty opinions, and suggested that the collection should be increased. Jacob Bell's knowledge of what pictures were likely to be popular is evidenced by his purchase from Mr. Frith of the picture which, under the title "Sherry, Sir?" has since become almost universally known. Mr. Frith gives the history of this picture. "A little study," he says, "done from a good-looking girl who was in my service as house-



maid had a great success as an engraving. I painted the girl not only in her habit as she lived, but in her habits also, for she was carrying a tray with a bottle of wine on it—the whole thing was simple enough. The picture was bought by Jacob Bell, who—convinced that there was what he called ‘copyright’ in it—succeeded in extracting forty guineas from a well-known publisher, who, differing in opinion from Bell as to the value of the copyright, immediately transferred it, at a great loss, to another and more adventurous printseller. Bell presented me with the copyright money, and I heard with pleasure that the picture was placed in the hands of Frank Holl, afterwards A.R.A., an admirable engraver and most worthy man. Holl produced an excellent print from the little picture. I approved, and it was published, after being—without my knowledge—christened ‘Sherry, Sir?’ What a thorn in my side did that terrible title become! I dined out frequently, and dreaded the approach of the servant with the sherry; for the inevitable ‘Sherry, sir?’ rang in my ears, and reminded my neighbour at the table of my crime.”

According to Mr. Frith, Jacob Bell was deservedly expelled from the Society of Friends for a boyish freak, which does not exhibit our hero in a very creditable light. He was caught attending “meeting” in female attire. That was clearly long before Landseer painted his portrait. But Jacob Bell would probably not have continued in communion with his father’s co-religionists long, even if the severance had not come so suddenly.

#### THE PRESIDENTS OF THE PHARMACEUTICAL SOCIETY.

William Allen, F.R.S., the first President of the Pharmaceutical Society, was a man of European fame when the Society was organised, and his name gave weight to the enterprise. But he was then over 70 years of age, and, with many philanthropic schemes in hand, it could hardly have been expected that he could devote himself very energetically to the work of the Pharmaceutical Society. He was the son of a Spitalfields silk manufacturer, and was a member of the Society of Friends, as his father had been before him. He had strong inclinations towards scientific investigations, and it was these that induced him to prefer the chemical trade to the silk manufacture. He entered the business of Messrs. Gurney & Bevan, in Plough Court, and ultimately succeeded to it. From him the firms of Allen & Hanburys and Howards & Sons (at first Allen & Howard) are directly descended. He was an intimate friend of Sir Humphry Davy, who introduced him as a lecturer at the Royal Institution, and for over twenty years he was a regular lecturer on chemistry at Guy’s Hospital. He became closely associated with Clarkson and Wilberforce in the anti-slavery crusade, and with James Mill in the conduct of a quarterly review called the *Philanthropist*. He was one of the founders of the British and Foreign School

Society, and he was also one of the partners with the atheist Robert Owen in the socialistic scheme which the latter organised. There arose some friction between Allen and Owen, and the latter has referred to his associate as narrow-minded, bustling, and ambitious. But Allen stuck to the scheme the longest. He became trustee for the Duke of Kent, father of the Queen, and was on more or less intimate terms with Alexander I., the Emperor of Russia, whom he once took to a Friends’ meeting-house. His last active effort was an “agricultural colony,” which he assisted in founding at Lindfield, in Sussex, where he died on December 30, 1843.

Mr. C. J. Payne, the second President, occupied the position only four months. But he had had a large share in the foundation of the Society. He was unknown to the majority of the chemists when he spoke at the meeting on February 15, 1841, but his clear sound sense was at once appreciated. Mr. Bell induced him to take an active part in the proceedings, and when the Society was formed he was appointed vice-president. This position he held until Mr. Allen’s death in January, 1844, when he was elected to the chair, but his failing health compelled him to relinquish all public work in the May following, and he died four months later. A very appreciative testimony to his services was inscribed on vellum, and presented to his daughter by the Council, and a duplicate was hung in the Council-room and is still preserved. Mr. Payne was a qualified apothecary, but he traded as a chemist and druggist only, in St. Martin’s Court. His shop has been improved away many years ago, none of his relatives are known, and no portrait of him can be obtained.

Mr. John Savory was his successor in the presidential chair, and retained the position four consecutive years.

William Allen F.R.S



He was a nephew of the first Savory whose name became connected with pharmacy, and it is his grandsons who are now associated with the well-known firm in Bond Street. The entire absence of any published record of the proceedings of the Pharmaceutical Council during the first twenty-five years of its existence precludes the possibility of doing fair justice to the services of its early officers. The long term of Mr. Savory’s presidency seems to indicate that he was a man of energy and power. He died in 1871.

Mr. T. N. R. Morson, who succeeded Mr. Savory in 1848, was President for one year then, and for nearly three years subsequently, when he was elected to fill the vacancy caused by the death of Jacob Bell. He was one of the pioneers of modern pharmacy, and was the first English chemist to make sulphate of quinine and morphia. He was a strong conservative pillar of the Pharmaceutical Society until 1870, when he retired. He died in March, 1874, at the age of 73.

Mr. Peter Squire became President first in 1849 for a year, and filled the office again for two years from 1861 to 1863. He, too, had fought his way up to the highest rank, and was







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Mr. George Webb Sandford occupied the chair from 1863 to 1869, during which time occurred the parliamentary contest which ended in the Pharmacy Act of 1868; he was elected again in 1870, after Mr. Evans's presidency, but he then came into collision with the flowing tide of pharmaceutical opinion on the subject of compulsory poisons regulations, and resigned his office before his year was quite complete. He was once more elected in 1879, and served for a year. Mr. Sandford's first presidency must ever be memorable, as it was on him that fell the bulk of the work in connection with the enactment of the statute already referred to. Mr. Bell had striven very hard to obtain legislative recognition of pharmacy, and restriction of its



WILLIAM INCE.

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retirement from office in 1869, his friends and admirers gave him a dinner in celebration of the success of his labours, at which a service of plate, worth 200 guineas, was presented to him, while for a further sum of about 300*l.*, the balance of the testimonial subscription, a portrait of him was painted by J. P. Knight, R.A., which is still one of the ornaments of the Council-room. Mr. Sandford is now living in retirement in his native county, Norfolk.

Mr. Henry Sugden Evans, who was elected to the presidency in 1869, was a popular and able wholesale druggist, who had made his mark as a pharmacist, particularly in the Liverpool Chemists' Association, of which he had been one of the founders. The annual meeting over which he presided in 1870 secured the unenviable reputation of being the most rowdy of the fifty, resulting almost in a free fight. A dead set against Mr. Evans was made by some London chemists in consequence of a statement that his firm had supplied drugs to a co-operative society, and an unscrupulous attempt was made to falsify the records of the voting by a too-enthusiastic scrutineer, who was found out, and retired from membership of the Society. Mr. Evans spent the latter years of his life in Canada, and died at New York about three years ago.

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John Savory

the first chemist to be gazetted as on the Royal Household. Since his death, the appointment has been shared by his two sons. Peter Squire was a man of great energy. He was on the Council from the foundation of the Society, and was for many years one of its most searching examiners. He did a large amount of pharmaceutical work, compiled his famous "Companion," and was the delegate of the Pharmaceutical Society on the committee which prepared the first Pharmacopœia of the United Kingdom. In the last year of his presidency, the Act was passed in which was inserted the clause exempting pharmaceutical chemists from jury service. To him, and to the secretary of the Society, Elias Bremridge, the credit of that achievement was mainly due. Mr. Squire died in April, 1884, in his 86th year.

Mr. William Ince was president for one year, in 1850-51. He was the manager of the famous old business of Godfrey & Cooke, in Southampton Street, Covent Garden, and was on the Council of the Pharmaceutical Society from its foundation till his death in March, 1853, in the 59th year of his age. It was during Mr Ince's presidency that Jacob Bell entered Parliament and commenced his advocacy of the Bill which resulted in the Pharmacy Act of 1852. Mr. Joseph Ince, well known to modern pharmacists, and the Rev. Canon Ince, D.D., Regius Professor of Divinity at Oxford, are his sons.

Thomas Herring, who followed (1851-52), was the first purely wholesale druggist in the chair. He had taken an active part in the formation of the Pharmaceutical Society along with several other of the London wholesale druggists. He had been apprenticed to the retail trade in Norwich, but had been engaged in a London house and commenced business for himself as a wholesale druggist in the Barbican in 1808. It was seven years later, when, his brother having joined him, the firm removed to the premises which their successors still occupy in Aldersgate Street. While President, Mr. Herring was one of the witnesses examined by the committee of the House of Commons appointed to consider Mr. Bell's pharmacy proposals. Mr. Herring died in September, 1864, in his 80th year.

Mr. Joseph Gifford was the next President. He was a chemist in the Strand, and it was he who filled the chair at the Crown and Anchor meeting in February, 1841, when the trade first met to oppose Mr. Hawes's bill. Mr. Gifford

died in 1857, in the 77th year of his age. We regret to have to add that a daughter of his is an annuitant on the Bencvolent Fund, which her father had assisted to create.

Henry Deane, who was elected President in 1853, and served for two years, was a typical retail pharmacist. He was of Quaker origin, and the story of his early struggles was told in autobiographical form in this journal in November, 1870. Mr. Deane was President during the time the Pharmaceutical Society was engaged in a long legal contest over the by-laws initiated by the stormy petrel of its fortunes, Mr. Dickinson, and as chairman of the Pharmacopœia Committee which acted in co-operation with the College of Physicians in making preliminary reports which led to the united British Pharmacopœia, he did a large amount of useful work. Perhaps no man among the line of Presidents won such wide-spread love and respect as Henry Deane. He died in April, 1874, aged 67.

After Mr. Deane, Mr. J. T. Davenport presided over the Society's fortunes for a year. Mr. Davenport had been an examiner, and he was, and indeed still is, a pharmacist in Great Russell Street, Bloomsbury, though the fortune he has made out of chlorodyne, since the days when he assisted at the Pharmaceutical Council meetings, has perhaps rendered his personal association with retail pharmacy in recent times little more than nominal.

In 1865, Mr. Jacob Bell himself accepted the presidency of the Society which he had so largely assisted to create. He had always exercised a pre-

dominant influence, but had preferred that the places of honour should be filled by others. His years of actual premiership were unhappily those of his weakest health, though he continued to write for the Society and to speak for it as long as his physical powers allowed him to do so. He was President for three full years, and had been just elected for a fourth term when death took him. When he presided at the annual meeting in May, 1859, only a month before his death, he had lost the power of speech, and his address was read for him. He went to Tunbridge Wells, and there, after making arrangements for the disposal of all his earthly goods, he calmly awaited the inevitable summons. He had only attained his 49th year.

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and, always excepting Jacob Bell, it may also be said of him that in labours he has been more abundant than any of them.

We give in this article sketch-portraits of all the presidents of the Pharmaceutical Society from its foundation to the present time, with the exception of Mr. C. J. Payne. No likeness of this gentleman can be discovered. The portrait of Mr. Allen is from an engraving lent by Messrs. Allen & Hanbury. The Rev. Dr. Ince kindly lent us a photograph of his father, taken from an oil-painting in his possession. Mr. Benridge was good enough to let us sketch the portrait

of Mr. Gifford, from a daguerreotype, which has been lent to the Pharmaceutical Society for a jubilee exhibition by his daughter; the portrait of Mr. Thomas Herring is from a photograph supplied by Mr. Esme, of Brighton; and the portrait of Mr. Carteighe is a pen-and-ink sketch of the oil painting of him by A. J. Foster, exhibited last year in the Royal Academy, and lately presented by some friends to the Pharmaceutical Society. The sketch of the Crown and Anchor at the head of this article is from a water-colour drawing by T. Hosmer Shepherd in the British Museum.



Joseph Gifford



Henry Deane



J. T. Davenport

#### RECOLLECTIONS OF JACOB BELL. By JOSEPH INCE.

My personal acquaintance with Jacob Bell was in connection with the publication of the *Pharmaceutical Journal*, of which he was both editor and proprietor. While a student in Paris I wrote a description of the *École de Médecine*, celebrated at that date for the lectures on chemistry by Orfila, and contrasted the enthusiasm there displayed with the still life, not to say apathy, shown at some of the courses at the *École de Pharmacie*. Mr. Bell saw this account, and had it put up in type; but it was too graphic in certain details, and very wisely was withdrawn. After my return to London I was surprised one afternoon to see Jacob Bell enter Godfrey's old pharmacy in Southampton Street. The occurrence was most unusual, and to my knowledge was only once repeated. I was engaged in the ordinary course of dispensing, when, after a few words, Mr. Bell said: "This is my Wednesday Journal Committee meeting; we have tea at my house in Langham Place—and you must join." I said it was impossible, as I was not free; to which his only answer was, "Where is your hat and coat?" He fetched both, made me put them on, get into his brougham, and we drove home. With this curious introduction I was enlisted in the service.

The committee was a council of four, under the general direction of the editor. Two matters were unofficially arranged—the compilation of the *Journal* for the month, and the supply of contributions to the evening meetings. Papers of a purely literary character and correspondence were reserved for publication in the former; while those of more general interest to the members of the Society, and which admitted of discussion, were handed over to be read and criticised, and officially inserted in the *Transactions*. Never was work done amidst more pleasurable surroundings.

The drawing-room in which the committee met was a gallery of art. The walls were hung, or rather hidden, by a collection of modern paintings, most of which have been presented to South Kensington; conspicuous amongst them were the "Derby Day" by Frith, and famous examples of Sir Edwin Landseer, Etty, and many other English artists.

The tea was good.

The mainstay of the committee was Professor Redwood, fertile in suggestion, and a veritable storehouse of information. Next came Daniel Hanbury, who spoke very little, but who elaborated his papers, which were not few, until each one became a classic; and next John Barnard, whose conscientious and untiring work and assiduous collection of material have scarcely received due acknowledgment.

The surprise I had felt at my first unceremonious introduction was deepened on discovering the contrast between Mr. Bell's apparently frigid manner in public and his overflowing geniality in private life. Neither forsook him. In the chair he appeared never able to shake off a peculiar chill of mannerism, almost amounting to hesitation. By the fireside he was a different character: his pleasantry and power of entertainment were as inexhaustible as his hospitality. The business of the committee was interrupted by outside visitors who had no connection with pharmacy whatsoever: chiefly by Sir Edwin Landseer, who rippled over with droll remark and conversation. "Now, I suppose, you must go," said Sir Edwin; "rammed up to the muzzle with your speeches to be let off before the Society!" He put an adjective before the last word derived from the animal kingdom. Of this great artist, but most childlike of men, Mr. Bell told me the following story:



Landseer had to paint a little dog which sat, or rather lay down in a fitting pose, with all the patience of a Christian.

When the sitting was over, the dog leapt down and made for the door.

"Come again at three o'clock," said the artist.

Away went the animal half-way down stairs.

"No; at a quarter past three, please," said Landseer, but whether the model turned up to time, history does not record.

Dallas, of the *Times*, was another visitor, and occasionally Mr. Morson, who then and afterwards was standing counsel, dropped in upon the proceedings.

Professor Bentley came later on the scene, and was present when the Editor had lost the power to speak, and communicated all his thoughts in writing.

There is very little to record in such personal recollections. In recital, and apart from living accompaniments, they fall flat; yet they are grateful in the remembrance, though impossible to realise in description.

I think the union of an essentially London life, with its amusements, social gatherings, literary, scientific and artistic, and an absolute devotion to the business of promoting pharmacy, was a distinctive point in the character of Jacob Bell. When a fresh Bill relating to pharmacy was in contemplation all other engagements were disregarded. Perhaps nothing was more characteristic than the undeviating pertinacity and hopefulness with which these Bills were pushed through their several stages. Often disappointed, he never relaxed his efforts or lost hope of ultimate success.

These documents seemed to follow him about, and to form part of the furniture of his study. He lived in the confident expectation that some day or other either he or a more fortunate successor would obtain full Parliamentary recognition, and that British pharmacy would gain a position at once legal and satisfactory.

On the other hand, a minor matter disturbed him much; indeed, the one anxiety I ever knew him to confess was a fear lest the evening meetings of the Society should fall off in attraction. Most commencements promise well, and British pharmacy was comparatively a new thing.

Good papers were contributed by writers whose names have become household words; the subjects treated of were of special practical interest; while explanations given of various processes were more than new—in many cases they were a revelation.

But would this continue? Would there be a succession of men who *knew*, and who would be willing to communicate their knowledge?

Mr. Bell doubted this, and the doubt was not easy to remove. While he himself was in the chair, and Pereira, Redwood, Deane, Morson, and Hanbury were the speakers, the danger was not imminent.

A serious episode took place with reference to this very subject—curious because it occurred immediately after one of the most successful sessions the Society had enjoyed. I will put it as nearly as possible in Mr. Bell's own words.

It had been arranged that the evening meetings should be under the superintendence of a committee officially appointed by the Council, and that all papers should be communicated through Professor Redwood as the scientific officer of the Society.

My father was President for the year: papers were abundant and the meetings were well attended. During the recess, however, great dissatisfaction arose with the conduct of affairs in the minds of some private members, and they expressed their sentiments in no softened terms.

Professor Redwood, they complained, was always in evidence; a clique monopolised attention, and Mr. Bell assumed too much the guidance of affairs. Meanwhile they, the private members, were thrown into the shade, and their latent talents were not disclosed.

Mr. Bell risked the situation, withdrew into the background, and handed over the entire control and management to the committee.

The day for the opening of the next session was fast approaching: the committee did nothing; no preparations were made; not a solitary paper turned up, nor the ghost of a suggestion, and the reader will search in vain for the record of the meeting which ought to have been held in October, 1851. Mr. Bell and Professor Redwood were requested to resume their original positions.

A careful examination of the subsequent reports of the Society, so far as they relate to this period, does not seem to me to show more than inevitable fluctuations.

One thing was astounding, especially when viewed in the light of the enthusiasm evinced by the students of to-day. The laboratory was crowded—the lecture-room persistently neglected. Now, the laboratory at that date was in the basement storey, terminated at one end by an old wine-cellar, with subterranean passages attached. The Underground Railway between Gower Street and the Edgware Road was arranged on the same principle. Owing to its structural position, odours of a permanent character condensed and settled; others of a more volatile nature aromatised the Council. We had frequent visits from our superiors wishing to know whether the original research on which we were engaged was absolutely essential to our education. Nevertheless, the worse the accommodation the better was the work; and Professor Redwood may look back on this period of his labours with unmingled satisfaction.

In the face of this exceptional success, the non-appreciation of the lecturo-room is difficult to understand. The younger generation disclaimed advantages which their elders would have gladly welcomed. This was discouraging and unexpected. The question was even raised as to whether



GEORGE WEBB SANDFORD.



the educational lectures should be abandoned. As a last expedient, it was suggested that they might be thrown open without fee, and thus a good attendance might be secured.

Whereupon Mr. Bell (*Pharm. Journ.*, vol. viii., p. 572, 1848-9) made his celebrated short speech. He said: "The experience of the Council had led to the belief that the reduction of the fees would not have the desired effect. They were originally less than at present, and the attendance was not very good. Then the Council doubled the fees, and the number of students increased. It was easy to take a horse to the water, but not so easy to make him drink. If young men had not the good sense to attend lectures at the moderate fees charged by the Society, they would not attend even were they paid to do so; and if they could attend for nothing they certainly would not take the trouble to come."

Mr. Bell's literary style is so well known that comment is almost unnecessary. The mass of the leading articles in the first series of the Journal were written by himself. They are marked by vigour and originality, but are frequently too diffuse.

He had great facility in composition—a gift against which a writer should be rigidly on guard. A leader should always finish where it ends—a statement in form paradoxical, but true. One of his happiest efforts was restricted to one page—"Adulteration and the *Lancet*" (*Pharm. Journ.*, vol. xv., p. 244, 1855-6).

The writer himself liked it well; so did John Baker Edwards, and so did I.

Up to this moment I cannot trace his best aphorism, which probably was in a speech—"It is foolish to protect a dangerous spot with a weak fence."

No one is justified in revealing the secrets of the hearth. I shall not fall into condemnation in adding personal witness to the courage with which he met his end. Suffering under a distressing affection of the throat, he went on his accustomed course. The symptoms gradually but steadily increased: the result was certain, but his activity was unchanged.

We have read of the ship which went down with all the men on board in perfect discipline and order. So died Jacob Bell, having awaited and prepared for the great change as calmly and with equal resignation.

Easter, 1891.

JOSEPH INCE.



H Sugden Evans



Thomas Hyde Hills

### THE MEETING AT THE CROWN AND ANCHOR.

BY ONE WHO WAS THERE.

WE have already mentioned Mr. Joseph Sidney Lescher as one of the survivors of the committee which was formed at the Crown and Anchor on April 15, 1841, to organise the then created Pharmaceutical Society. This gentleman has very kindly consented to dictate for us (through his son, Mr. F. Harwood Lescher) a few recollections of that meeting. Mr. Lescher's narrative is none the less interesting for its occasional digressions. It is as follows:—

Although now in my 88th year, I well remember the meeting on or about April 15, 1841 (it might have been in February of that year), that was the real commencement of the Pharmaceutical Society. A Bill was to be laid before Parliament by a Mr. Hawes, that would have brought chemists under the control and inspection of the medical profession, and this in the supposed interest and for the general safety of the public.

But, the leading druggists of those days were alive to the threatened danger, and then the wholesale men made common cause with them—perhaps in a more public and formal way than they do at the present day. Possibly then chemists, not yet united, were glad of the support of the large London wholesale firms; now the Pharmaceutical Society can well walk alone. This meeting, held in a large room at the Crown and Anchor, Fleet Street, was well attended. I went there with several others of the wholesale trade as representing my firm. John Stable was a wholesale druggist of 27 High Holborn; (then the firm became John Stable, Junior, of Lambeth Hill; then, taking in John Evans, it became Stable & Evans, of Wood Street. When I took Stable's place it was, in 1835, Evans & Lescher, of Wood Street, and afterwards of Cripplegate Buildings, and then Bartholomew Close, where the firm became Evans, Lescher, & Evans, and afterwards Evans, Lescher & Webb.

Mr. John Evans was at one time in the firm that was successively Kempson & Hermon, of Snow Hill; then John Kempson; then Kempson, Yates, Parkinson, Brown & Roper; then Kempson, Yates, Evans & Parkinson; then Kempson, Yates & Co., of Budge Row.

But I stray from my subject: you must excuse the garrulity of my eighty eight winters, of which this one, not yet ended, seems one of the longest

A F Haselden



I had served my articles with Jenks & Wheeler, who did a large business in spices, tea, &c., as well as drugs; one of the partner-travellers boasted that he could sell something to every tradesman in a town. It was in these early days that an apprentice in my recollection being re-

brokers not agreeing to certain allowances, for months we abstained from bidding for castor-oil.

We were well represented at this meeting. Richard H. Pigeon was a leading man in our trade, and in the City he was treasurer of Christ's Hospital.



John Williams



Thomas Greenish

quired to make some mixture and refusing, said: "It would be adulteration, and this is contrary to the Bible." Said his master: "There was no drug-trade when the Bible was written." We have certainly made great progress in purity of drugs since those days. I don't remember any

exact prices in 1835, but I recollect that about 1825 we paid 40s. per oz. for Sulphate of Quinine; 18s. per drachm for Acetate and Sulphate of Morphia; 7s. per oz. for Iodine; 9s. per oz. for Hydriodate of Potass, and 25s. per drachm for Strychnine. Comparing price lists (few and far between in those days) then and now, medical men knew of and used but few drugs then, and rang the changes principally on rhubarb, senna, calomel, opium and castor oil. I am told that in the last ten years nearly 500 new articles have been added to our materia medica. I think physic cured as many then as now, but I am also sure that improved sanitary science, better drainage, better nursing, more skilful care for the sick, saves many lives that would in those days

have been lost. The wholesale drug-trade was very united at that time; there was a drug club, where we used to dine together and discuss trade matters. Amongst other things, this led to the fortnightly drug sales; and once, owing to

The brothers Herring (Thomas and Thrower) were amongst the first to emphasise the purity and excellence of drugs and preparations. Their powders began the onward movement up to the *present* position of the English wholesale trade, where one house competes against another

in giving the very finest articles to chemists. If the pharmaceutical examinations have raised the status of the latter, surely the wholesale trade have led the way in excellence and purity of drugs and their preparation. Thomas Herring generally drove down from his house in Rosslyn Hill, Hampstead, which is still standing. Richard Battley lived then opposite to me in Pond Street, Hampstead, and we were great friends. Charles Barron, tall, thin, and handsome, of much influence amongst us, and Charles Davy, a busy, pleasant man, the senior partners in Barron, Harveys & Co., and Davy, McMurdo & Co., were also there. One of the Horners was there; they had a large business in original packages of drugs. Thomas Keating and Samuel Foulger also



Michael Carteighe

were there, as wholesale druggists. John Ellis represented Langton's; S. de Castro (Keating's partner) was there; R. Farmar, the vitriol-maker of Kennington; William Allen, F.R.S. (first President of the Pharmaceutical Society),



Mr. Barry (from Allen & Hanburys), and Thomas Butler, of Cheapside.

The leading men of the London retail chemists were: W. Ince, of Godfrey and Crooke, whom everybody liked; E. Winstanly, of Cheapside, whose business was afterwards taken by Corbys; Charles Dinneford, an able man; G. W. Smith, who became the first secretary of the Pharmaceutical Society; George Waugh, a man of fine appearance and a good speaker, but who did not like opposition to his views; and last, but not least, Jacob Bell, who was one of the leaders of the movement. He was a man of great culture and polished manners, and his services were invaluable.

Messrs. Morson, Squire and Savory were not at this meeting, but joined the movement afterwards; the two former took a forward position in the early ranks of the Pharmaceutical Society.

This memorable meeting was unanimous in its opposition to Mr. Hawes's measure; it showed the strength and union of chemists and druggists, wholesale and retail, and led to the formation of the Pharmaceutical Society, to the first council of which I was nominated, and of which I was, therefore, one of the founders.

(Signed) JOSEPH SIDNEY LESCHER.

Hampstead, April 14, 1891.

## Pharmaceutical Society of Great Britain.

### FIRST OR PRELIMINARY EXAMINATION.

Questions set on Tuesday, April 14.

#### LATIN.

(TIME ALLOWED—FROM 11 A.M. TO 12.30 P.M.)

I. For all Candidates. Translate into Latin:—

1. Many things are done by one man.
2. We all ask you for peace.
3. They said nobody would be able to help him.
4. Caesar warned them not to help the enemy.
5. The word being given, our men made an attack upon the Gauls.

II. Translate into English *either* A (Caesar) *or* B (Virgil).

(Candidates must not attempt both Authors.)

#### A. CAESAR.

1. Caesar, quod memoria tenebat, L. Cassium consulem occisum, exercitumque ejus ab Helvetiis pulsum et sub jugum missum, eoneedendum non putabat: neque homines inimico animo, data facultate per provinciam itineris facili, temperaturos ab injuria et maleficio existimabat. Tamen, ut spatium intercedere posset, dum milites, quos imperaverat, convenirent, legatis respondit, diem se ad deliberandum sumpturum.

2. Haec eodem tempore Caesar mandata referebantur, et legati ab Aeduis et a Trevis veniebant; Aedui questum, quod Harudes, qui nuper in Galliam transportati essent, fines eorum popularentur; sese ne obsidibus quidem datis pacem Ariovisti redimere potuissent; Treviri autem, pagos centum Suevorum ad ripam Rheni concessissc, qui Rhenum transire conarentur; his praesce Nasum et Cimberium fratres. Quibus rebus Caesar vehementer commotus maturandum sibi existimavit, ne, si nova manus Suevorum cum veteribus copiis Ariovisti sese conjunxisset, minus facile resisti posset.

*Grammatical Questions.*—For those only who took Caesar.

1. Decline throughout, in the singular, *nova manus*; in the plural, *vetcribus copiis* (Par. 2).
2. Give the first person singular of the indicative mood, perfect tense, of all the verbs in paragraph 1.
3. Write in Latin 7, 36, 475, 4th, 28th, *twice*, *three* *apiece*.
4. Distinguish between *ne*, *nonne*, and *num*, in asking questions.

#### B. VIRGIL.

1. Olli subridens hominum sator atque deorum,  
Vultu, quo eolum tempestatesque serenat,  
Oscula libavit natae; dehinc talia fatur:

"Parce metu, Cytherea: manent immota tuorum  
Fata tibi; cernes urbem et promissa Lavini  
Moenia, sublimemque fores ad sidera coeli  
Magnanimum Aeneam; neque me sententia vertit."

2. Namque videbat, uti bella ante Pergama creant  
Hac fugerent Graii, premeret Trojana juvenus;  
Hac Phryges, iustaret currum eristatus Achilles.  
Nec procul hinc Rhesi niveis tentoria velis  
Agnoscat lacrimas, primo quae proditi summo  
Tydides multa vastabat caede eructus,  
Ardentesque avritit equos in castra, prius quam  
Pabula gustassent Trojae, Nanthumque bibissent.

*Grammatical Questions.* For those only who took Virgil.

1. Decline in full and give the genders of *tempestates*, *oscula*, *natae*, *moenia*, *coeli* (Par. 1).
2. Give the first person singular of the indicative mood, perfect tense, of all the verbs in paragraph 2.
3. Write in Latin 7, 36, 479, 4th, 28th, *twice*, *three* *apiece*.
4. Distinguish between *ne*, *nonne*, and *num*, in asking questions.

### ARITHMETIC.

(Time allowed—From 12.30 P.M. to 2 P.M.)

[The working of the questions, as well as the answers, must be written out in full.]

1. Find the sum of all prime numbers from 100 to 150 and write the result in Roman characters.
2. An iron merchant buys 16,008 tons of iron at 4*l.* 13*s.* 4*d.* per ton; he sells half of it at cost price, half of the remainder at a profit of  $\frac{1}{2}$ *d.* a lb., and the rest at a profit of  $\frac{1}{4}$ *d.* a lb.; find his gain.
3. Simplify  $(12\frac{5}{6} - 8\frac{3}{4} - 1\frac{1}{10} + \frac{8}{15}) \times 4\frac{1}{2} \times (7\frac{5}{12} - 6\frac{1}{2})$ .
4. A pile of 33 books is 4 ft. 8.83 in. in height; find the average thickness of each book.
5. By how much is 35 m. 7 centim. less than the average of 34 m. 2 decim., 37 m. 8 decim., 36 m. 9 decim., 35 m. 7 decim., 36 m. 6 decim., and 34 m. 8 decim.?
6. Find the cost of papering a room 25 ft. 8 in. long, 19 $\frac{1}{2}$  ft. broad, 14 $\frac{1}{2}$  ft. high, with paper 2 ft. 5 in. wide, at 2 $\frac{1}{4}$ *d.* a yard.
7. If 100.8 lbs. of flour support 20 men for 3 days, how many men will 46.305 cwt. support for 7.35 weeks?

### ENGLISH.

(Time allowed—from 3 P.M. to 4.30 P.M.)

1. Analyse the following:—

Fair ship, that from the Italian shore  
Sallest the placid ocean-plains  
With my lost Arthur's loved remains,  
Spread thy full wings, and waft him o'er.

2. Parse fully: "In words, like weeds, I'll wrap me o'er."
3. Correct the following sentences, giving your reasons:—  
(i.) Saying and doing is a very different thing.  
(ii.) If I had drank the mixture I would have recovered.  
(iii.) He referred to the smallest of the two memorandums.

4. In the following passage supply the necessary capital letters, and put in the stops and inverted commas where necessary:—pray my young friend said he as they grew familiar together what may i call your name why i am very nimble as you see answered the traveller so if you call me quicksilver the name will fit tolerably well quicksilver quicksilver repeated philemon looking in the traveller's face to see if he were making fun of him it is a very odd name and your companion there has he as strange a one

\* 5. Write a short composition on *one* of the following subjects:—

- (i.) The mental and physical values of outdoor games.
- (ii.) The advantages which Britain derives from her insular position.
- (iii.) Any historic building you have seen.
- (iv.) "Sweet are the uses of adversity."

\* This must be attempted by every candidate.



## NORTH BRITISH BRANCH.

A MEETING of the Executive was held in Edinburgh on Wednesday, Mr. William Gilmour in the chair. Messrs. James Mackenzie and Adam Gibson (Edinburgh), Alexander Strachan (Aberdeen), J. H. Fisher (Dunfermline), William R. Kermath (St. Andrews), James Watt (Haddington), Charles Kerr and James M. Hardie (Dundee), S. Lawrence (Oban), David Storrar (Kirkcaldy), and John Nesbit (Portobello), were also present.

## EXAMINATIONS IN ORKNEY AND SHETLAND.

Mr. HILL stated that, as directed, he had forwarded to the Council the recommendation of the Executive at last meeting, that examinations should be held in Orkney and Shetland in the same manner as they were carried out in Guernsey and Jersey. He had received the following reply from the Society in London:—

"I am instructed to say, in reply, that the subject will be taken into consideration when the centres of examination have been determined next year."

Mr. WATT: The Council will consent if it is at all practicable. Take Shetland, for instance: there is communication in the winter only twice a week.

Mr. STRACHAN: But four times a week in summer.

Mr. WATT: That was the only reason why it was delayed—in order that proper arrangements might be made.

Mr. STRACHAN: Well, the mails are to be increased now.

Mr. FISHER: I think it will be very important to have one centre in Kirkwall. It is only a matter of some eight or ten hours' sailing from Lerwick to Kirkwall.

Mr. STRACHAN: There is no reason why the examinations should not be held in both towns.

Mr. KERMATH: Who would they propose to appoint in Kirkwall?

Mr. FISHER: There is Mr. Stewart, a very good man, and a pharmaceutical chemist.

Mr. KERMATH: Then, I think, we should request them to make arrangements as quickly as possible.

Mr. WATT: You have to consider the whole arrangements in connection with such an appointment. For instance, Wick was talked about. There is regular communication with Wick, but the matter is in the meantime delayed.

Mr. MACKENZIE: Oh, Scotch geography is not very well understood in London. (Laughter.)

The CHAIRMAN: I think we can safely leave this matter in the hands of our Scotch members on the Council. (Hear, hear.)

Mr. WATT: I may mention that there is a great desire on the part of the President to carry out this suggestion.

## THE ELECTION OF THE EXECUTIVE.

On the motion of the CHAIRMAN, it was resolved:—

That the next election of the Executive take place on Wednesday, June 17, and that the chairman and vice-chairman be appointed scrutineers of the voting papers, with power to add to their number.

The Executive then sat in committee. The annual report to the Council was read by the assistant secretary and ordered to be forwarded to London.

## THE PHARMACY ACTS AMENDMENT BILL—THE EXECUTIVE AND THE GLASGOW ASSISTANTS.

Mr. KERR said he had a communication from Mr. J. Walker, Glasgow, in reference to some matters that the assistants of the city were considering under the Pharmacy Acts Amendment Bill. They desired that unqualified assistants who had been fifteen or ten years at the trade should be registered without examination to remain as assistants. They were getting up a protest against the Bill now before Parliament, and they had printed a circular to be sent to members of Parliament to induce them to have an amendment introduced so as to obtain the privilege they desired.

The CHAIRMAN thought they should not take up this matter for discussion. It was not for them to take it up as an executive.

Mr. STORRAR said they could only take it up as a mere matter of information.

Mr. WATT asked why as an executive they could not take up the question? They need not put themselves in the posi-

tion of parties antagonistic to the Bill, but they might express their opinion upon it.

Mr. STORRAR: The question is—Can we take up as an executive a proposal to petition for or against this Bill?

Mr. KERR: It is only information I am going to give you as to what is being done outside.

Mr. MACKENZIE: I see Mr. Gilmour's difficulty. Finish the business, and the chairman can leave the chair. We can then discuss the question competently.

Mr. WATT: This is a question which is likely to seriously affect the position of the Bill before Parliament, and are we going to ignore it and deny ourselves the privilege of discussing it? In my opinion this is a matter which the Executive should take up. The Executive I presume to be either in favour of or against this Bill, and here is a serious matter which the assistants propose to raise in connection with it. Now I think it is a very serious subject for us to discuss.

Mr. STORRAR: I would not like to be misunderstood. If it is simply to discuss what is being done, I think it is a very proper subject to be brought before the Executive, but I understood Mr. Kerr to ask this Executive to approve or disapprove of this circular, and take part in the assistants' action.

Mr. KERR: Oh, not at all. I only bring the matter before you for your information as to what is being done. I got a letter asking me to send the circular to the members of Parliament for Dundee, which I have done, and received replies.

The CHAIRMAN: So far as I am concerned, I have not the slightest objection to the document being read: but, as an executive, to have a discussion on a circular which we have never seen, I think it out of order.

A MEMBER: This matter is not on the billet.

Mr. FISHER: But any matter may be brought up.

Mr. NESBIT: I do not think it would be proper for us to give an opinion upon this question. Some may agree, and some may be against the proposal. We should take neither one side nor the other.

The CHAIRMAN: We are discussing what we know nothing at all about.

Mr. STORRAR: I propose that this matter be discussed in committee.

Mr. WATT: I really must oppose it being taken in committee, as it is an important matter affecting the trade. (Hear, hear.)

Mr. STORRAR: I propose that we should be in committee. We are not discussing a public question. We are discussing whether certain business should be taken up by the Executive or not. In the meantime I do not see why it should be sent all over the country, whether a certain thing should be taken into consideration or not.

Mr. MACKENZIE: Will you tell us upon what rule, Mr. Chairman, you decide this discussion is irrelevant?

Mr. STORRAR: I beg again to move that we go into committee.

Mr. NESBIT seconded.

Mr. WATT proposed that the matter be considered in public.

Mr. FISHER seconded.

On a division, 5 voted for Mr. Storrar's motion and 4 for Mr. Watt's amendment.

The discussion, which was of short duration, ended, we are informed, in no action being taken in regard to the Glasgow petition.

## THE APPROACHING JUBILEE.

On business being resumed in public,

Mr. STRACHAN said he had heard it mentioned in Aberdeen that there was good reason why there should be a celebration of the pharmaceutical jubilee in Edinburgh as well as in London.

The CHAIRMAN asked if their representatives at the Council could inform them what was being done.

Mr. STORRAR said there was to be a reception in the Society's rooms, which would develop into a *conversazione*, and a dinner afterwards.

Mr. MACKENZIE: Of course that is the thing. (Laughter.)

This initiated a short conversation, and, on the chairman's suggestion, the matter was left to the new Executive.

This was all the public business.





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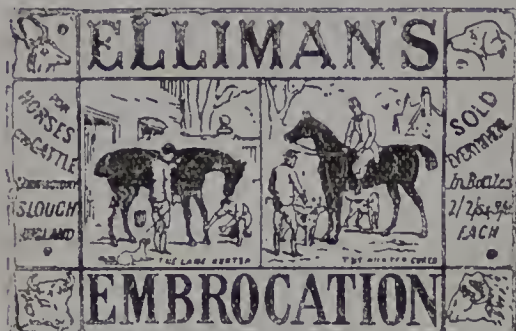
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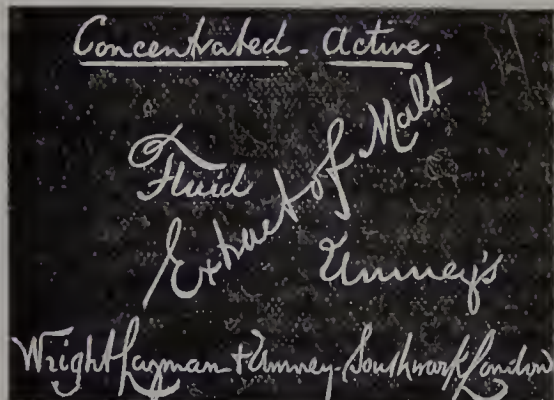
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PURE  
CRUSHED LINSEED 18s. cwt. in 56 lb. & 1 cwt. bags,  
or in 14 & 28 lbs. 19 - cwt.

PURE  
STARCH POWDER

In 1 cwt. and  $\frac{1}{2}$  cwt. bags, at 25 cwt.  
In 7, 14, and 28 lbs., at 28 cwt.

PURE  
FULLERS EARTH.

FINEST Levigated, 1 cwt. and  $\frac{1}{2}$  cwt.,  
16/ cwt.; in 7, 14, & 28 lbs., 18/ cwt.  
Fine Levigated, 1 cwt. &  $\frac{1}{2}$  cwt., 14  
cwt.; in 7, 14, & 28 lbs., 16 cwt.

CARRIAGE PAID.

To Railway Stations in  
England, or half to Scotland,  
Ireland and Wales, on parcels  
of a total weight of not less  
than 1 cwt.

SAMPLES POST FREE  
CARRIAGE PAID.

IF YOU WANT BRILLIANT SYRUPS, USE

Fletcher's  
Concentrated Liquors

# EDITORIAL NOTES.

THE JUBILEE OF THE PHARMA-  
CEUTICAL SOCIETY.

THE Pharmaceutical Society of Great Britain reached its  
fiftieth birthday on Wednesday last, and, it may be  
added, in mind, body, and estate. We have thought the  
occasion appropriate for giving a brief sketch of the origin



A Copy of this Supplement is inserted in every number issued of "The Chemist & Druggist!"

# The Chemist and Druggist

## SUPPLEMENT

Businesses Wanted.  
Businesses for Disposal.  
Premises to Let.  
Auction Sales.

SATURDAY, APRIL 18, 1891.

Partnerships.  
Situations Vacant.  
Situations Wanted.  
Miscellaneous.

### NOTICE.

Copies of the SUPPLEMENT TO THE CHEMIST AND DRUGGIST (containing advertisements of Situations Vacant and Wanted, Businesses for Disposal, &c.) of April 25, 1891,

WILL BE SENT TO

**EVERY CHEMIST AND DRUGGIST IN BUSINESS IN GREAT BRITAIN,**

AND WILL BE SUPPLIED

**FREE TO ANY ASSISTANT WHO APPLIES FOR IT PERSONALLY.**

A COPY WILL ALSO BE POSTED TO

**ANYONE CONNECTED WITH THE TRADE WHO SENDS A STAMPED ADDRESSED WRAPPER FOR IT.**

Advertisements for this Supplement can be received on Friday morning, first post, though it is requested that they may be sent in as early in the week as possible.

### CHEMISTS' TRANSFERS.

**MESSRS. ORRIDGE & CO., 32 LUDGATE HILL, E.C.**

**CHEMISTS' TRANSFER AGENTS,**

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION.

The business conducted by Messrs. ORRIDGE & Co. has been known as a Transfer Agency since the year 1846, and is well known to all the leading firms in the Trade. VENDORS have the advantage of obtaining an opinion on value derived from extensive experience, and are in most cases enabled to avoid an infinity of trouble by making a selection from a list of applicants for purchase, with the view of submitting confidential particulars to those alone who are most likely to possess business qualifications and adequate means for investment. PURCHASERS who desire early information regarding eligible opportunities for entering business will greatly facilitate their object by describing clearly the class of connection they wish to obtain.

1.—LONDON, N.W.—Established Business, situate in a main road; returns over £900, largely cash; well-fitted shop and good stock; convenient house, held on lease; price £750.

2.—LONDON SUBURB.—Old-established Business, situate in a pretty locality; returns £1,000 yearly, with very good profits; well-fitted, large, convenient shop; good house and garden, held on beneficial lease; particulars on application.

3.—LONDON, S.E.—Old-established Business, situate in a very busy locality; returns £500 yearly; Post Office attached; house held on lease at low rental; double-fronted shop; convenient house; price £475.

4.—LONDON SUBURB.—Good locality; Retail and Dispensing Business; established nearly 20 years; returns £950, yearly increasing; net profit 33 per cent.; good 8-roomed house and attractive shop on long lease; price about £900.

5.—LONDON, N.—Dispensing and Retail; established 50 years; returns between £800 and £900 yearly; net profit very much above the average, from Proprietaries; good stock, handsome shop, and good house, held on beneficial lease; price, including good lease, £1,100.

6.—KENT.—Dispensing and Retail Business, with good Proprietaries; returns over £800 yearly; single-fronted shop and good 8-roomed house, with small garden; price £850.

7.—DEVONSHIRE (DEATH VACANCY).—Very old-established good-class Business; returns nearly £500 yearly with good stock; shop well fitted; large house; business open to the fullest investigation; immediate sale is required, and the executors will accept any reasonable offer.

8.—SURREY.—Dispensing and Retail, with Post Office attached; returns between £750 and £800 yearly; profits fully up to the average; single-fronted shop and good house, with private entrance, garden, &c.; rent £60, on lease; about £650 required, or valuation can be arranged if wished.

9.—EASTERN COUNTY.—Easy distance of town; an Agricultural Business, well-situated in a central position; returns £1,650 yearly; profits fully up to average; valuation of stock and fixtures only required; full particulars on application.

10.—LEICESTERSHIRE.—First-class Country Business, established many years; returns £800 yearly, good profit; handsome shop, large and convenient warehouse and garden; price £700.

11.—MIDLANDS.—Mixed Business, situate in a good busy manufacturing town; returns £1,500 yearly; capital opportunity for a good business man; price about £850.

12.—BRIGHTON.—Good-class Retail and Dispensing; returns £700 yearly; well-fitted shop and good stock; good 6-roomed house, on lease; price about £480.

13.—NOTTINGHAM.—Light Retail and Prescribing Business, established many years; returns between £425 and £450 yearly; corner shop; very moderate rental; about £200 required.

14.—CORNWALL.—Dispensing and Retail Business, situate in a small town, pleasantly situated; returns over £300 yearly, easily extended; no opposition; good-sized house, with garden; rent £20; price £250.

**Particulars of any of the above will be furnished on application.**

**N.B.—NO CHARGE TO PURCHASERS.**

Other Businesses, Town and Country, particulars free on application. Personal applicants receive Messrs. O. & Co.'s direct attention and advice, where required, free.

**TERMS FOR VALUATION ON APPLICATION. APPOINTMENTS BY POST OR WIRE HAVE IMMEDIATE ATTENTION.**

Messrs. ORRIDGE & Co. invite communications from COLONIAL and FOREIGN firms where business of a confidential nature requires the especial attention of a London agent.

**SPECIAL NOTICE.—TO PRINCIPALS AND ASSISTANTS.**

**MESSRS. ORRIDGE & Co. Register Vacancies for Situations FREE OF CHARGE.**

Vacancies for one or two good men now open.

**ORRIDGE & CO., 32 Ludgate Hill, LONDON, E.C.**



**F. J. BRETT,**  
**VALUER, LEICESTER,**

80 St. Stephen's Road.

References to principal London and Provincial Wholesale Houses, also to numerous clients throughout the United Kingdom.

**BUSINESSES THOROUGHLY INVESTIGATED FOR BUYERS. 20 YEARS' EXPERIENCE.**  
STOCKTAKING UNNECESSARY.—Stocktaking is always dreaded by Chemists, and with a competent Valuer is not necessary.

F. J. BRETT is prepared to estimate or to value entire stocks as they stand with little or no inconvenience to ordinary business, and has repeatedly done so with entire satisfaction to those adopting this mode.

STOCKS AND FURNITURES BOUGHT FOR CASH.

**MIDLANDS.**—Returns £1,100; good General trade, capable of considerable extension; price £450, or valuation.**WALES.**—Unopposed profitable Retail; returns over £400; good house, garden, &c.; rent £16; price £225.**LANCASHIRE.**—Returns £350; neglected through illness; good specialties; price £200 or valuation.**LONDON, N.W.**—Dispensing and Light Retail; over 1,000 new prescriptions per annum; returns £700; price £550.**LEICESTERSHIRE.**—Good Family Retail; large house with garden, lawn and greenhouses; returns £800; price £650.**YORKSHIRE.**—Light Retail in large village; returns £700; net profit £250; price £600.**MESSRS. BERDOE & CO.**

CHEMISTS' TRANSFER AGENTS &amp; VALUERS,

30 JEWRY STREET, ALDGATE, E.C.

Established 1870.

VALUATIONS AND TRANSFERS conducted in any part of the United Kingdom. Twenty years' practical experience. Terms, which are strictly moderate, may be had on application.

NO CHARGE TO PURCHASERS.

**ESSEX.**—Market town; Retail, Dispensing, and Agricultural trade; returns £2,000; net profit £500; price £1,200, part remain.**KENT.**—Market town; Retail, Dispensing, and Prescribing; returns £850; net profit £350; good house; price £650, or offer.**BOURNEMOUTH.**—First class Retail and Dispensing Business; returns £600; capable of development; good house; price £500.**MIDLANDS.**—Retail and Dispensing; same hands 50 years; retiring; returns £1,500; net profit £600; price £1,300.**MANCHESTER (near).**—Retail, Dispensing, and Prescribing; returns £1,200; rent £35; price, valuation, about £700; owner retiring.**SURREY.**—Large town; Retail, Dispensing, and Prescribing; returns £750; net profit £300, under management; price £525.**KENT (15 miles out).**—Retail and Dispensing; returns £500; increasing; P.O. attached; good house; price £425.**WEST OF ENGLAND.**—Unopposed; Retail, Dispensing, and Prescribing; returns £650; rent £30; good house; price £280, or offer.**BUCKS.**—Market town; Retail and Dispensing Business; returns £820, increasing; good house; price £750; trial allowed.**WILTSHIRE.**—Retail, Dispensing, and Agricultural; returns £1,200; good profits; 10-roomed house, garden; price £800, or valuation.**MIDLANDS.**—Retail and Prescribing Trade; returns £750; net profit £300; good house and garden; price £500; trial allowed.**SUSSEX.**—Retail and Dispensing Trade; returns £700; same hands 27 years; price £500; partner taken with £250.**LONDON, S.W.**—Retail and Dispensing Business; excellent position; returns £750; capable of increase; good profits; price £500.**LONDON, W.**—Retail and Dispensing; returns £400 as branch; P.O. pays rent; good house; price £250.**LONDON, N.**—Retail and Dispensing; returning £400 under assistant; good house and garden; valuation only, about £200.**NEW RADFORD AND BRIXTON.**—We desire to call the special attention of buyers to these Businesses, offered for sale by Tender in another column.

Particulars of any of the above sent free on application.

Other Businesses, Town and Country, from £100 to £5,000.

Messrs. Berdoe &amp; Co., 30 Jewry St., Aldgate, London, E.C.

**BUSINESSES FOR DISPOSAL.**

3s. 6d. for fifty words; 6d. for every 10 words beyond.

**A**T a sacrifice, through death of proprietor, a genuine old-established country Retail Business; returns £320. J. E. Bury, Chemist, Burford, Oxon.**A**SMALL Profitable Business in North London, now under management; lease at £50; more than half let off; easy terms to purchaser. C. A., 218 Kentish Town Road, N.W.**L**ONDON, North; main road; best position; returns £850 under management; severe illness the cause of disposal; handsome modern shop; good stock; price £600; inspection invited. L., 62 Upper Tootington Park, N.**F**OR immediate disposal, an old-established Retail Drug and Prescribing Business, in a Lancashire manufacturing town; good house attached; returns last year over £900; price £550. Address, "Opium," care of Messrs. Evans, Sons & Co., Liverpool.**Messrs. CROCKER & CO.**Trade Valuers, Transfer Agents, and Accountants,  
**15 WALBROOK, E.C.****EASTERN COUNTIES.**—An old-established Retail and Dispensing Business, in best part of market town; returns £650; price £150.**HOME COUNTY.**—Light Retail and Dispensing; returns £400; low rent; price £320; large and convenient house, with nice garden.**DEVON.**—Old-established Retail and Dispensing, with good sale of own specialties; returns £600; price £450; good house and garden.**KENT.**—Family and Dispensing trade, with Post Office; returns over £800; price £600; large house and garden.**BUCKS.**—Light Retail and Dispensing; very low rent; returns £450; price £350; good house and garden; worth attention.**MIDLANDS.**—Retail, Dispensing and Prescribing; returns £500; price £200; double-fronted handsome pharmacy.**WEST OF ENGLAND** (fashionable health resort).—Old-established Retail and Dispensing; returns £1,200; price £1,200.**SURREY.**—Light Retail and Dispensing; returns £800; price £650; good house; handsome pharmacy; agency pays rent.**KENT.**—Good class Family and Dispensing; returns £350; price £700; long lease at a low rent; good house.**YORKSHIRE.**—Family Dispensing and Prescribing trade in suburbs of large town; returns £300; price £700; rent £10; good house and garden.**ESSEX.**—Light Retail, Dispensing and Prescribing trade; returns £720; price £675; rent £45; 11-roomed house and large garden.**LANCASHIRE.**—Good class General Country Retail and Dispensing Business; in same hands many years; returns £1,300; rent low; price £700; open to reasonable offer; worth attention.**CHESHIRE.**—Old-established Country trade; returns £1,000; price, valuation only; large and convenient house; rent £40.**HANTS.**—Light Retail and Dispensing; returns £400, and increasing; large and convenient premises, held on long lease at a very low rental; price £200.**LONDON, N. (Main Road).**—Good class Retail and Dispensing; returns £400, and can be doubled with ordinary attention; price £200 to a quick buyer.**LONDON, S.E.**—Retail and Prescribing trade; unopposed position; returns £500; price £400; rent £40; good house, &c.**LONDON, S.E.**—Suburb.—Retail and Dispensing; handsomely-fitted, double-fronted shop; returns £1,400; rent £50; price £1,100; or a Partnership would be entertained, with a view to present owner retiring.**LONDON, S.**—Good class Retail and Dispensing trade; returns £500; low rent; price £350; capital position in marketing thoroughfare.**LONDON, N.**—Old-established Retail, Prescribing, and Dispensing; many years in same hands; returns £570; price £500.

NO CHARGE TO PURCHASERS.

VALUATIONS A SPECIALITY. TERMS ON APPLICATION.

**BUSINESSES FOR DISPOSAL—Continued.****A** GENUINE Chemist's Business for Sale; a bargain; owner going into medical; returns about £450, under manager; rapidly increasing neighbourhood; every investigation given. Address, "Leo," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.**D**EATH VACANCY.—For disposal, owing to death of proprietor, a small Retail Business at Wisbech, Cambs; rent £16 or purchase; in late proprietor's hands 50 years; stock and fixtures at valuation, which would be low on account of long illness of late proprietor. Robbins, Walsoken, Norfolk.**F**OR DISPOSAL.—Hereford; an old-established Dispensing, Family Retail, and Agricultural Business; situated in the best position in the City; thoroughly genuine, and every investigation offered; satisfactory reasons for disposal; immediate possession may be had. For full particulars apply to Morris, Chemist, Hereford.**£110.**—Retail and Prescribing Business; making £100 yearly net profit guaranteed; no patents sold; good class suburb, S.W.; low rent; good house; owner accepted appointment; must sell at once; third could remain; well fitted; stock worth £50; see this at once. Address, "Bargain," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.**£1,478** average annual returns the last 3 years, at a good profit, may be increased by personal attention; Dispensing, Prescribing, and good general Mixed Trade in the best Agricultural district in Cambridgeshire; established upwards of 50 years; present hands 25 years; price £1,200. Apply, "Sound," Harvey, 6 Gill'spur Street, and Umney, 50 Southwark Street.**G**LOUCESTERSHIRE.—Unopposed Retail, Dispensing, and Prescribing Business; returning £100; rent £28; house has nine good rooms; population, 5,000, selling solely through illness; price £400, or reasonable offer; good opening for dentistry; every proof given as to bona fides. "Feirum," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.**T**O be disposed of immediately, a fine Pharmacy, situated in one of the great Seaport and Commercial centres of the East; will be sold at a sacrifice, as proprietor is desirous of devoting himself to another business; the value of installation and stock of drugs and specialties was at last inventory £2,000, and the annual turnover has been an equal amount; a cash payment of £500 would be required, and terms could be arranged regarding payment of remainder of purchase money. For further information, apply to "Orient," care of S. R. Van Duzer & Son, 114 & 116 Southampton Row, W.C.



## SITUATIONS OPEN—Continued.

**GOOD** Assistant; aged about 25; accustomed to first-class business; two kept. Apply, Hardeastle & Co., Brighton.

**IMMEDIATELY**, for good-class Dispensing business, qualified Assistant; indoors. Parkes, 193 Belsize Road, Kilburn.

**COUNTERMAN** (indoors); about 23; cash business, N.W.; liberal salary. Apply, stating experience, &c., to J. H. Lewis, 22 and 24 Great Portland Street, W.

**JUNIOR** Assistant, accustomed to a Mixed business; outdoors. State age, height, salary required, when disengaged, and give references, to R. Mumford, Chemist, Splottland, Cardiff.

**AN** active Junior Assistant for a good and quick business; 10 i.m.; good references indispensable. Apply, with carte if possible (to be returned), stating height, salary required, &c., to Corfe, Chemist, Maidstone.

**J. W. DENNIS & SON**, Dispensing and Family Chemists, require a Junior Assistant (indoors) at once for the Counter; applicants must not be under 23 years of age; state age, height, salary, &c., with references.

**WANTED**, an energetic young man, with knowledge of the Drug trade, to assist Traveller in representing a Wholesale firm in the Midlands. Apply, 172 30, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**JUNIOR** or Improver wanted, quick and active, not afraid of work, in a good-class Dispensing business. Apply, with particulars of age, reference, &c., to J. W. Feltwell, 91 Hammersmith Road, West Kensington, W.

**IMMEDIATELY**, an Assistant, about 22 years of age; indoors; accustomed to good-class business, and well up in Dispensing. Apply, stating age, height, salary, and references, to J. Aunday, Chemist, 1 High Street, Cardiff.

**A QUALIFIED** Senior Assistant; must be good Dispenser and Salesman, competent and trustworthy; please state details of experience, age, height, salary required (outdoors), when disengaged, and if possible send c. de v. (to be returned); three Assistants kept; short hours. John Brew, 10 Church Street, Great Malvern.

**IMMEDIATELY**, smart Junior or Turnover (requiring permanency), of good address, for Retail, Dispensing, and Photographie business (or branch); industrious, obliging, and trustworthy; Tooth-extractor, Prescriber, and good Salesman preferred. State age, height, experience, outdoor salary, &c. (enclosing photo and references), to "Pharmacy," 73 Freeman Street, &c., Grimsby. Also outdoor Apprentice wanted.

## SITUATIONS WANTED.

*1s. for twelve words; 6d. for every six words beyond.*

**PART-TIME**; 12 years' experience; Prescriber; Extractor. D., 73 High Street, Gravesend.

**ASSISTANT**; 23; Lancashire preferred; abstainer; references. J. R., 355 Bolton Road, Darwen.

**OUTDOORS**; Minor qualification; short hours; London. "Signa," 53 High Street, Stoke Newington.

**JUNIOR**; 21; disengaged; 7 years' experience. Sidebottom, Oatlow Hall, St. Oswaldwistle, Lancashire.

**LOCUM-TENENS** or Manager; qualified; aged 37; abstainer. L. J. E., 3 Woburn Place, Russell Square, W.C.

**AS** Branch Manager or Assistant; good references; qualified; aged 26. E. S. B., 150 Great Knolly's Street, Reading.

**AS** Assistant; 8 years' experience; aged 25; good references; abstainer. "Rhei," 3 Wyndham Street, Bryanston Square, W.

**AS** Assistant; aged 20½; 5 years' experience; London preferred; satisfactory references. "Cymro," 67 Walton Street, Oxford.

**AS** Junior; age 21; height, 5 ft. 9 in.; abstainer; Bournemouth preferred. Apply, Blakeley, The Pharmacy, Pokesdown, Bournemouth.

**LOCUM-TENENS** or temporary Manager; country preferred; qualified, steady, and reliable; highest references. "Extractor," 23 Florence Road, London, S.E.

**JUNIOR**, aged 22, as Dispenser; good references. D. E., 33 Fentham Road, Clapham.

**LOCUM-TENENS**; disengaged early in May. "Locum," Trinity Square, Llandudno.

**MANAGER** or Assistant; qualified; disengaged. O., Mr. Williams, 174 New Kent Road, S.E.

**JUNIOR** or Improver; aged 20; good references. Wellburn, 31 Newport Road, Middlesbrough.

**LOCUM-TENENS**; disengaged Thursday; qualified. "Esculap," 32 Laurel Grove, Pengo.

**WHOLESALE** or Manufacturing House, as Assistant. D. Lloyd, Temple Street, Wolverhampton.

**LOCUM-TENENS**; aged 24; disengaged; qualified; Extractor. 50 Seymour Street, St. John's, S.E.

**IMMEDIATELY**; aged 29; experienced. "Juro," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**AS** Dispenser; 7 years' first-class experience; highest references; 23; disengaged May 2nd. "Alpha," 10A Chandos Street, W.

**MANAGER**; Dispenser; 23; married; permanency; disengaged shortly. By letter, "Chemist," 19 Gough Street, Birmingham.

**TO** Manage a Branch; can Extract Teeth, &c.; qualified; married; good Prescriber; aged 40. "Chemicus," 14 Gerrard Street, Aston, Birmingham.

**AS** Branch Manager; good Dispenser, Prescriber, and tooth extractor; married (27); good references. "Bowen," 69 Hagley Street, Stourbridge.

**MANAGEMENT**, with view to early purchase for cash, Neglected Business; good main preferred. "Extractor," 8 Fried Street, Paldington, W.

**MAJOR**, experienced, desires engagement, Manager or Senior; good-class trade; locum-tenens or permanency. Munro, Barnard's Green, Malvern.

**TRAVELLER**; 9 years' experience North and Midlands; good connection; salary or commission. Fletcher, 115 New Park Road, Salford, Manchester.

**MANAGER**, Senior or Locum-tenens; 26 years' experience; London preferred; disengaged. 27 14, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**AS** Assistant to Medical Man, or Chemist's Manager; aged 39; married; over 20 years' varied experience; testimonials most praiseworthy. Address, "Statim," 53 Upper North Street, Poplar, E.

**DISPENSER** and Bookkeeper to Surgeon, qualified and experienced, desires engagement, permanent or temporary, in or near Town. N., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**ASSISTANT** or Manager; Lancashire preferred; over 12 years' varied experience; married; good address, Prescriber, Dispenser, and references; 5 ft. 10½ in. Address, Mountcastle, La Motte, St. Helier.

**AS** Junior in a good Retail and Dispensing business, or Dispenser to a Doctor; aged 21; 5½ years' experience; height 5 feet 8 inches. "Rhei," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**AS** Assistant in good London Dispensing house, with 3 hours a day for study; small salary; Minor qualification; excellent references; aged 30. "Dens," 8 Queen Street, Edgware Road.

**AS** Manager; permanent or otherwise; age 40; married; qualified; highest references; can take charge of dental surgery; registered and dental hospital experience. "Dens," c/o Mr. Crocker, 15 Walbrook, E.C.

**REQUIRED**, Situation with a respectable Chemist, affording every opportunity of improvement; a good Dispenser; premium if required. Apply, "Statim," care of Andrew, 9 Bishopston Lane, Stockton-on-Tees.

**TRAVELLER**, with good and safe connection successfully worked, for 20 years in South Wales, &c., will shortly be disengaged, and open to re-engagement on commission or otherwise; can influence trade for respectable house; thoroughly acquainted with all branches of the trade, wholesale and retail. References and full particulars, "Druggist," 7 Orlinton Street, Cardiff.



## SITUATIONS OPEN.

3s. 6d. for fifty words; 8d. for every 10 words beyond.

**ASSISTANT**, about 23, accustomed to Dispensing. Apply to H. T. Griffith, 10 Victorin Street, Clifton, Bristol.

**MANAGER** or qualified Assistant for a Branch Business; one with view to purchase preferred. Wyles, 1 New Bridge, Dover.

**WANTED**, at once, a qualified Assistant, not under 23, accustomed to a good Country trade. Fletober, Chemist, Retford, Notts.

**WANTED**, an active Junior (outdoors). State reference and salary to J. C. Pottage, Homoeopathic Chemist, 117 Pricess Street, Edinburgh.

**WANTED**, an Assistant, about 21; abstainer; must be obliging and trustworthy; state full particulars. Pearoo, Chemist, Tavistock.

**ASSISTANT**, qualified (indoors), wanted for Mixed business. Apply, stating salary, with references and photo, Colman, Chemist, Wolverhampton.

**JUNIOR Assistant** required, at once, for a London house (outdoors). Apply by letter, and in own handwriting, J. Ford, 70 Kennington Park Road, London, S.E.

**COMPETENT** and trustworthy Assistant, who has been accustomed to first-class business. State age and salary required, with references, to Bradley & Bliss, Reading.

**AN Assistant**, about 25 years of age; good references indispensable. Apply, stating salary required, to Fraoio Swift, Chemist, 33 Chatsworth Road, Clapton Park, London, N.E.

**DRUGGISTS' SUNDRIES**.—Wanted, a Young Man for the General Sundries Department; state age, experience, and salary required. Ayrtton & Saunders, Liverpool.

**JUNIOR Assistant**; well up in Dispensing and Family Retail. Apply, stating age, height, reference, salary required, enclosing photo, and when disengaged, to John Lea, Folkstone.

**WANTED**, Dispenser; abstainer (outdoors); daily, 1.30 to 2.30 and 5.30 to 9.30, Sundays 2 to 3; salary 15s. 6d. weekly. "Dr.," 101 Northcote Road, Olapham Junction, London, S.W.

**JUNIOR ASSISTANT** (indoors); qualified; not under 23; must have had first-class Retail and Dispensing experience. Apply, with full particulars, to Brady & Martin, Newcastle-on-Tyne.

**QUALIFIED Assistant** for Light Retail and Dispensing; to live at and take charge of business premises; hours moderate. Send full particulars, with references, to Coley, Chemist, Stroud.

**MAN** wanted in Manufacturing Laboratory; good references indispensable. Apply, stating age, salary, and experience, to A. O., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**QUALIFIED Assistant** wanted; must have first-class references, be able to extract teeth, and have a thorough knowledge of Agricultural business. Apply to J. McCall White, Wigton, Cumberland.

**ASSISTANT** (indoors) by 21st inst.; Light Retail and Dispensing; hours 8 till 9; Saturdays later; half day off each week, and alternate Sunday duty. Full particulars to Cooper, 17 High Road, Balham.

**WANTED**, at once, qualified Assistant to manage a branch; salary and commission; must be reliable and trustworthy. State full particulars and references to J. Vivian Williams, Chemist, Plymouth.

**WANTED**, an Assistant about 26 to manage a branch; Dispensing, Prescribing, and Light Retail; salary £50. Address, with particulars and references, to J. Woodcock, 75 Shaw Street, Liverpool.

**A COMPETENT**, trustworthy Junior Assistant of good address, accustomed to Prescribing and Retail; must be able to extract teeth. Mr. J. D. Pidgeon, 6 Lewisham High Road, New Cross, S.E.

**ASSISTANT**; Minor qualification; must be a quick and accurate Dispenser and good Counterman; state age, height, reference, and enclose carte. Milton & Son, Pharmacologists, 246 High Street, Exeter.

**DENTISTRY**.—A vacancy for Pupil in above is open for smart Lad, 16 to 18 years old, for surgery and mechanical; references given both medical and chemical. Tbos. F. Green, Dentist, 113 Leytonstone Road, E.

**WANTED**, immediately, Indoor Dispenser; aged 25; Ironworks practice; salary, £30. Apply, enclosing carte and reference, to "Caradoc," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**WANTED**, Junior or Improver for the Summer Season (outdoors); engagement could be entered upon at once; state age, salary required, &c., to H. J. Jackson, Pharmaceutical Chemist, Bridlington Quay.

**QUALIFIED Assistant** wanted for good-class business (outdoors); liberal salary to superior man. Full particulars to G. B. R., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**WANTED**, Indoor Assistant, between 20 and 30; must be good Tooth Extractor, and have good references. Apply, stating age, height, and salary, to W. Aspinall, Chemist, 56 Market Place, Wigan.

**WANTED**, by May 11th, a Junior Assistant, indoors; one having just completed his apprenticeship preferred. Apply with full particulars to Dixon & Co., Chemists, 3 Exchange Walk, Nottingham.

**IMPROVER** or Junior Assistant in a Mixed Country business. Apply, with particulars of age, experience, salary required, &c., enclosing carte (Churchman preferred), to Chas. H. Bradshaw, Tiekhill, Rotherham.

**WANTED**, by leading provincial house, thoroughly reliable Assistant, in or out doors. Apply, enclosing photo and full particulars, to "Nottingham," care of Barron, Harveys & Co., Giltspur Street, London.

**MR. STAMP**, Hampstead, N.W., is in immediate want of a competent Dispenser; one with qualification would have the preference; (indoors); short hours; comfortable home. Address, as above, enclosing photo, if possible.

**QUALIFIED Assistant**; permanent and indoor; familiar with good-class Dispensing and Retail; age about 23. Applicants will please state height, salary required, reference, experience, &c., to Messrs. George & Welch, Worcester.

**WANTED**, general indoor Assistant for Mixed trade; good Tooth Extractor essential, and not afraid of work; Thursday half-holiday; enclose full particulars, and photo (returnable). Cooper, 8 Marsland Street, Stockport.

**DISPENSER** (qualified) required at the Haymarket Stores; hours 9 to 7, Saturdays 2.30; outdoors. Apply by letter only, stating salary and all particulars to "The Chemist," Civil Service Co-operative Society, 28 Haymarket, London, S.W.

**AT once**, good Counterman (indoors), about 23, for brisk cash business, N.W.; liberal salary to suitable hand seeking permanency. Apply, stating experience, &c., to X., Messrs. Hodgkinson & Co., 101 Whitecross Street, E.C. Also vacancy for smart Dispenser.

**SENIOR** wanted (outdoors); not under 25; good General business; no Sunday or night work; Warehouseman and Apprentices kept; hours 8 to 7.40, Saturdays 10; good salary to suitable man. Reply, with full particulars, to R. Fell, King Street, Huddersfield.

**WESTGATE ON SEA**.—Immediately, a competent qualified Assistant, of good address, for a first-class Dispensing business; must be gentlemanly, obliging, and trustworthy. Apply, with height, carte, and references, to F. R. Bessant, Pharmaceutical Chemist.

**WANTED**, a good Junior Assistant; indoors; accustomed to good-class Retail and Dispensing business. State age, height, reference, salary required, and enclose, if possible, carte de visite (which will be returned), "Pharmacist," 100 Burlington Street, Manchester.

**BLACKPOOL**.—Shortly, indoor Assistant; good moral character; age not under 21; medium height; a conscientious man of fairly good abilities and experience will find a considerate employer and healthy, comfortable home all the year round. Jackson, Chemist, Blackpool.

**DISPENSER** required immediately for a firm of Surgeons; must be steady and reliable in every way, and have good references; salary to commence at £80. Apply by letter to Mr. Huish, Overhill, Lordship Lane, S.E., or call Saturday between 12 and 2 at 300 High Holborn, W.C.

**OUTDOOR Assistant** required; must be a competent Dispenser, and accustomed to a good-class business; with Minor qualification preferred; no Sunday duty. Apply, stating age, height, salary required, and references, and enclosing carte de visite, to W. T. Hicks, 25 Parade, Cardiff.

**MESSRS. PAYNE & ADAMS**, Shrewsbury, require an Assistant at the end of the month for the Retail counter; not under 24, and must have had experience in a good-class business. Applicants are requested to state age, height, salary expected (indoors), and to enclose photograph.

**QUALIFIED Assistant**, not under 30, Christian Nonconformist; used to best-class Dispensing business, and travel occasionally; seeking permanency; man of quiet energy; South of England. Address, preliminary particulars to "Seux," c/o Edwards & Son, 157 Queen Victoria Street, London.

**A QUALIFIED Assistant** wanted the middle of this month; one seeking permanency preferred; an accurate and quick Dispenser, of good address and obliging business habits; must have had good experience. Apply, stating age, height, and salary required, to H. 175 West End Lane, West Hampstead.

**MANCHESTER**.—Wright & Barnaby, Pharmaceutical Chemists, 223 Oxford Street, require an indoor Assistant about 24 years of age; must have had experience in a good Dispensing business; two assistants and an apprentice kept; state age, height, salary, when at liberty, and enclose carte. Apply to Mr. Barnaby.



# The Chemist and Druggist

## SUPPLEMENT

Businesses Wanted.  
Businesses for Disposal.  
Premises to Let.  
Auction Sales.

SATURDAY, APRIL 11, 1891.

Partnerships.  
Situations Vacant.  
Situations Wanted.  
Miscellaneous.

This Supplement will be given free to any Chemist and Druggist or Assistant who will call for it at 42 Cannon Street on Friday afternoon, or will be posted on Fridays to any one who sends an addressed postal wrapper.

OFFICES: 42 CANNON ST., LONDON, E.C.

### IMPORTANT.

THE CIRCULATION of this Issue of "THE CHEMIST AND DRUGGIST" SUPPLEMENT amounts to **12,650 COPIES**, distributed to as many Chemists and Druggists in Business. This is the Largest and Most Influential Circulation of any Medium addressing the Drug Trade, and for that reason Chemists and their Assistants should not fail to advertise their wants in it. Advertisements for this Supplement should be sent by Thursday of each week, although we can receive them by first post on Friday mornings.

### CHEMISTS' TRANSFERS.

**MESSRS. ORRIDGE & CO., 32 LUDGATE HILL, E.C.**

CHEMISTS' TRANSFER AGENTS,

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION.

The business conducted by Messrs. ORRIDGE & Co. has been known as a Transfer Agency since the year 1845, and is well known to all the leading firms in the Trade. VENDORS have the advantage of obtaining an opinion on value derived from extensive experience, and are in most cases enabled to avoid an infinity of trouble by making a selection from a list of applicants for purchase, with the view of submitting confidential particulars to those alone who are most likely to possess business qualifications and adequate means for investment. PURCHASERS who desire early information regarding eligible opportunities for entering business will greatly facilitate their object by describing clearly the class of connection they wish to obtain.

1.—£950.—LONDON (near the Bank).—Dispensing and Retail; capable of very large development; pre-out returns £350 yearly; £1,000 required; applicants must send trade card or reference.

2.—£850.—LONDON, N.—Good-class Dispensing Business; very handsome shop; returns about £850 yearly; very profitable; capital house, with yard and warehouse, held on beneficial lease; price to be arranged.

3.—£725.—LONDON, N.—Good-class Dispensing and Retail; situate in a good middle-class locality; returns £725; large handsome shop and good house; price £700.

4.—£950.—LONDON SUBURB, E.—Very good-class Dispensing, Prescribing, and Retail; very nicely-fitted shop, and good house; returns over £950; easily worked; profits exceptionally good; comfortable house; price £850.

5.—£1,000.—LONDON, S.—Within eight miles of Charing Cross.—Very good class Dispensing Business; no heavy trade; very pretty locality; good residential neighbourhood; returns £1,000 yearly; very profitable; good house and garden; rent low; held on lease; terms on application.

6.—£1,050.—ESSEX.—Easy distance from town.—Old-established Business; commodious shop; good house and garden; returns from business amount to £1,650 yearly, with good profits; vendor, having other engagements, will accept valuation of stock and fixtures.

7.—£900.—LANCASHIRE.—Very old-established Business; returns over £900 yearly; large double-fronted shop and commodious house (may be rented or purchased); price £725, or, if preferred, valuation of stock and fixtures.

8.—£800.—MIDLAND COUNTY.—Good class Family Business; returns £800 yearly, very good profit; some good Proprietaries included; large handsome shop and good residence, with garden, &c.; price £700.

9.—£850.—SEASIDE (South Coast).—Fashionable town; first-class Pharmacy; returns between £850 and £1,000 yearly; the business premises possess every convenience for high-class work, and there is a good residence; terms and particulars on application; card or reference requested.

10.—£800.—SUSSEX.—Dispensing and Retail; returns last year £800, increasing; double-fronted shop and commodious house, with garden and conservatory; very pretty situation; price £650.

11.—SOUTHERN COUNTY.—Good-class Retail and Dispensing Business, situate in a first-class residential locality; returns nearly £700 yearly; very handsome shop and good house; rent low; price £650.

12.—£725.—SURREY.—Easy distance from London.—Capital position in a large town; Retail and Dispensing Business, capable of very large extension; returns over £725; good house with private entrance; price £550; full investigation.

13.—£300 or £400.—MANUFACTURING TOWN, N.—Very old-established Business, capital situation for extending heavier trade, Drysaltery, &c.; no goodwill required; valuation of stock and fixtures only required, or lump sum if wished; vendor going abroad.

14.—£225.—SURREY.—Unopposed Business; capital position; has been much neglected; about £225 required; good opportunity for a branch or for the investment of small capital.

Particulars of any of the above will be furnished on application.

N.B.—NO CHARGE TO PURCHASERS.

Other Businesses, Town and Country; particulars free on application. Personal applicants receive Messrs. O. & Co.'s direct attention and advice, where required, free.

TERMS FOR VALUATION ON APPLICATION. APPOINTMENTS BY POST OR WIRE HAVE IMMEDIATE ATTENTION.

Messrs. ORRIDGE & Co. invite communications from COLONIAL and FOREIGN firms where business of a confidential nature requires the especial attention of a London agent.

SPECIAL NOTICE.—TO PRINCIPALS AND ASSISTANTS.

MESSRS. ORRIDGE & Co. Register Vacancies for Situations FREE OF CHARGE.

Vacancies for one or two good men now open.

ORRIDGE & CO., 32 Ludgate Hill, LONDON, E.C.



## F. J. BRETT, VALUER, LEICESTER,

60 St. Stephen's Road.

References to principal London and Provincial Wholesale Houses, also to numerous clients throughout the United Kingdom.

**BUSINESSES THOROUGHLY INVESTIGATED FOR BUYERS. 20 YEARS' EXPERIENCE.**

**STOCKTAKING UNNECESSARY.**—Stocktaking is always dreaded by Chemists, and with a competent Valuer is not necessary.

F. J. BRETT is prepared to estimate or to value entire stocks as they stand with little or no inconvenience to ordinary business, and has repeatedly done so with entire satisfaction to those adopting this mode.

**BIRMINGHAM.**—Light Retail and Prescribing; returns £450; net profit £400; price £310.

**LANCASHIRE.**—Large town; returns £300; good position for pushing trade; valuation £250; open to offer.

**NOTTINGHAM.**—Prescribing, Retail, and Dispensing; returns £600; vendor going abroad; price £300.

**WILTS.**—Old-established Retail, with Gilbey's agency; healthy town; returns £1,300; price about £800, or at goodwill and valuation.

**BIRMINGHAM.**—Small business; only requires personal attention; price £60, less than value of fixtures.

**MIDLANDS.**—Returns £650; good General trade; large house and shop; valuation about £500.

## BUSINESSES FOR DISPOSAL.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

**A**T a sacrifice, through failing health; a small genuine Retail and Prescribing Business, in N.W. district. B. W. Willows, Francis & Butler, 101 High Holborn, W.C.

**L**ONDON, North, main road, best position; returns £850 under management; serious illness the cause of disposal; lease 14 years; handsome modern shop; good stock; price £600; inspection invited. L., 62 Upper Tooting Park, N.

**P**ATENT Medicine and Drug Store Business; main thoroughfare; London, N.; good opportunity for qualified Chemist to add Dispensing; present returns about £250. 31/72, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**F**OR immediate disposal, an old-established Retail Drug and Prescribing Business, in a Lancashire manufacturing town; good house attached; returns last year over £900; price £550. Address, "Opium," care of Messrs. Evans, Sons & Co., Liverpool.

**O**FFERS wanted.—To be sold under exceptional circumstances, nucleus of a first-class Business; handsomely fitted and well stocked; established 3 years; good house and garden; moderate rent. X. Y., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**A** GENUINE Chemist's Business for Sale; a bargain; owner going into medical; returns about £150 under manager; rapidly increasing neighbourhood; every investigation given. Address, "Leo," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**S**OUTH OF ENGLAND.—A good-class Business of a very profitable nature, making a return of £800 yearly; price £600; large well-fitted shop, good stock; no heavy trade; low rent; 9 rooms, small garden; satisfactory reasons for selling. Address, "Carbo," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**L**ONDON CHEMISTS.—A small Business, established 8 years, for Sale, situated in a densely-populated neighbourhood; corner shop, neatly fitted; suit a gentleman with limited means; incoming very low to an immediate purchaser; no opposition near. B.B., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**L**ANCASHIRE.—In a good business town, Retail, Dispensing, and Prescribing Business; returning £1,200, at excellent prices; low rental; convenient house and business premises; owner, retiring, will accept £700 or valuation; strictest investigation offered. C. S. D., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**E**ASTERN COUNTIES.—Old-established Retail, Prescribing, and Dispensing Business; same hands 17 years; owner retiring; returns last year £340, and increasing; price £180; long lease; rent £14; good garden, with lawn and fruit trees; investigation courted; no agents. "Carbon," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**£563** average net profit last 3 years; one proprietary nearly £100. —For sale, Light Retail and Prescribing, ready-money Business, showing above; situate main thoroughfare, London, E.; established nearly a century; rent, on lease, £15; house small; vendor retiring; cash price, 2 years' profit; every investigation courted; no agents. Cedar, 53 Bedford Street, Mile End, E.

**£1,478** average annual returns the last 3 years, at a good profit, may be increased by personal attention; Dispensing, Prescribing, and good general Mixed Trade in the best Agricultural district in Cambridgeshire; established upwards of 50 years; present hands 23 years; price £1,200. Apply, "Sound," Harvey, 6 Giltspur Street, and Cuney, 50 Southwark Street.

## Messrs. CROCKER & CO.

Trade Valuers, Transfer Agents, and Accountants,  
15 WALBROOK, E.C.

**EASTERN COUNTIES.**—An old-established Retail and Dispensing Business, in best part of market town; returns £650; price £450.

**LANCASHIRE.**—Death vacancy.—Returns £500; valuation of stock and fixtures will be accepted to effect a quick sale.

**YORKSHIRE.**—Mixed trade, in suburbs of busy manufacturing town; returns £500; price £700; worth attention.

**NORTH OF ENGLAND.**—An old-established Family and Dispensing trade, with wines and spirits; returns £1,100; price about £700; strongly recommended as a safe and reliable investment.

**SOUTH COAST.**—Light Retail, Prescribing, and Dispensing trade; returns under very indifferent management £330; price £125.

**LONDON, N.E.**—Good-class Family and Dispensing trade; returns £720; low rent; price £675; worth attention.

**LONDON, S.E.**—Suburb.—Retail and Dispensing; handsomely-fitted, double-fronted shop; returns £1,400; rent £50; price £1,100; or a Partnership would be entertained, with a view to present owner retiring.

**NO CHARGE TO PURCHASERS.**

**VALUATIONS A SPECIALITY. TERMS ON APPLICATION.**

## BUSINESSES FOR DISPOSAL—Continued.

**O**LD-ESTABLISHED Drug Trade, Retail and Prescribing; good town, South Staffordshire; commanding shop; good house; no goodwill. 156/2, Office of THE CHEMIST AND DRUGGIST, 42 Cannon St., E.C.

**C**HEMISTS and Druggists' Business, with Post Office attached, N.W. district of London; much neglected; takings £11 weekly; populous neighbourhood. Apply, K., Messrs. Hodgkinson, Prestons & King, 81 Bishopsgate Street Without.

**F**OR DISPOSAL, with immediate possession, a well-stocked Chemist's Shop, situated in a good position; splendid opportunity; satisfactory reasons. For particulars address E. M., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**£425.**—SOUTH OF ENGLAND.—Good-class Retail and Dispensing Business, in a fashionable seaside town; good position; satisfactory reason for disposal. Address, "Rhei," care of Messrs. Hodgkinson, Treacher & Clarke, 101 Whitecross Street, London, E.C.

**A**N old-established Business in Surrey, doing a select Retail and Dispensing trade only; no cutting; returns about £500; large house, garden, and stabling; on lease; splendid opening for Dentistry; price £650. Apply to "Antipyrin," 50 Southwark Street, London. No agents.

**Y**ORKSHIRE.—Good Country Retail, with Wines and Spirits, returning £1,600 per annum, and capable of considerable increase; nett profit £500; illness sole cause of sale; incoming about £1,000, or stock could be reduced if desired. F. J. Brett, Valuer, 60 St. Stephen's Road, Leicester.

**L**ONDON.—Old-established Business; average returns for 10 years over £900, with plenty of scope for increase with personal attention; £800 required; a fair offer; easy terms and trial can be arranged; good lease, stock, proprietaries, &c. Apply, "Casara," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**£250.**—LIGHT Retail and Dispensing; no heavy trade; situated in market place of small town; one other Chemist to unopposed district of 8,000; established over 60 years; been neglected and lately under manager; present returns £300, could easily be trebled; good house, lease if desired. Elliott, Chemist, Bedford.

**S**USSEX.—Retail, Dispensing, and Agricultural business; handsomely fitted, mahogany; good prices; very saleable specialities attached; large stock; comfortable house; average returns for past five years £700; cause of sale, going into partnership; every investigation offered; price £650. "Bromo," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**C**HEMIST'S special prompt sale; bargain.—Thomas Tomlinson & Son, 9 New Cannon Street, Manchester, have for disposal the old-established Business of the late Mr. William Greenhalgh, of Pendlebury, near that city; the executors must clear up the estate at once, so are willing to accept a discount of 25 per cent. from valuation, about £230, or about £150 net; returns at death near £600.

**£200.**—Light Retail, Prescribing and Dispensing Business in growing town old-established; much neglected; returns over £5, has done £10 lately; wants good business man with knowledge of country trade; shop well fitted and stocked; good reasons for disposal; no reasonable offer refused; worth attention. "Chemicus," Wright, Layman & Umney, 50 Southwark Street, S.E.

**T**HOMAS TOMLINSON & SON, Chemist's Agents and Valuers, Manchester, have for disposal a sterling Drug Business, with Light profitable Groceries, and doing above £1,500 a year, in a suburban and manufacturing village where there is no other chemist, which they can confidently recommend; amount about £300, but present owner, being from special reasons anxious to sell at once, would let part of amount remain for a term.



## SITUATIONS OPEN—Continued.

**MANAGER** wanted (indoors); qualified; aged about 28; must be a thoroughly competent business man, of good general experience, and be able to produce substantial testimonials; a Junior kept. Apply, stating usual particulars, to Geo. Duioi, 630 Holloway Road, N.

**ASSISTANT**, at once, accustomed to good-class Retail and Dispensing; hours 8 to 9, two nights off at 7 weekly, 1 hour each morning, half-a-day monthly, alternate Sundays; salary £10. Apply personally, or photo (to be returned), stating full particulars, F. H. Glew, 156 Clapham Road, S.W.

**WANTED**, Temporary Assistant, qualified, indoors; or with view to purchase; small Country business; duties almost nil; would suit one requiring change and rest; state salary, which must be very low; c.d.v. if possible. Apply, A. B. C., Office of CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**AN** active Assistant, about 23, for a good-class Retail and Dispensing business in London suburb, by April 16; abstainer and member of Christian Church preferred; comfortable home; full particulars, photo, and salary required. J. H. H., Messrs. Edwards & Son, 157 Queen Victoria Street, E.C.

**ASSISTANT**; thoroughly competent Dispenser and Counterman; good-class Country trade; abstainer and member of Christian Church. State full particulars, salary required, and age (photograph if possible), J. W., Messrs. Evans, Losehor & Webb, 60 Bartholomew Close, London, E.C.

**AN** experienced qualified Assistant for high-class Dispensing and Retail business; indoors; 2 kept; liberal salary to suitable man. Address, with full particulars of experience, with age, height, salary required, and enclose photo, to Charles White, Pharm. Chemist, Buckingham Palace Road, London, S.W.

**QUALIFIED** Junior, for Light Retail and Dispensing; chance of learning operative and mechanical Dentistry; reference must bear investigation; one half-day from 2 and one evening from 7 per week off; applicants must take an interest in shop and proprietaries. Usual particulars and photo to "Chemist and Dentist," 70 Oxtou Road, Birkenhead.

**AS** Senior and Managing Assistant, qualified, indoors, in a high-class West end business; a thoroughly responsible, energetic man, of good address and mature experience; also a gentleman about 25, and qualified, as Second Assistant; references must bear strictest investigation. Apply, by letter, with full particulars, carte, and state salary required, to "Proprietor," Horner & Sons, Mitre Square, Aldgate, E.C.

## SITUATIONS WANTED.

*1s. for twelve words; 6d. for every six words beyond.*

**JUNIOR** (20); in good business; satisfactory reference. Field, Post Office, Ossett.

**ASSISTANT**; good London experience; London preferred. Owen, 19 Grange Road, Camden Town.

**ASSISTANT**; outdoors; London; excellent references; qualified. 23 Falmouth Road, Borough, S.E.

**LOCUM TENENS**. Manzer, or Dispenser; qualified; disengaged. "Extractor," 92 Howson Road, Brockley.

**LOCUM-TENENS** or Manager; qualified; aged 37; abstainer. L. J. E., 3 Woburn Place, Russell Square, W.C.

**QUALIFIED** Assistant; outdoors; tall; aged 26; 12 years' good experience. J. D., 2 Melgund Terrace, Edinburgh.

**AS** Assistant, in or near London; short hours or time for study; aged 24. A. B., 3 Wyndham Street, Brynston Square, W.

**ASSISTANT** or Manzer; aged 29; experienced. "Extractor," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**MANAGER** for Branch, or Temporary; qualified; highest references; many years' experience. R., 41 Rigault Road, Fulham, S.W.

**AS** Junior; accustomed to first-class dispensing; 5 years' experience; good references. S. Hook, Monmouth Street, Bridgwater, Somerset.

**QUALIFIED** Assistant; aged 23; 64 years' experience; good references. "Alpha," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street E.C.

**IMPROVER**; 4 years' experience in General, Retail, and Dispensing trade; passed Preliminary; aged 20; time for study. Palmer, Priddy, Wells, Somerset.

**JUNIOR** (19); 4 years' experience. H., 30 Boetwell Street, Chesterfield.

**AS** Assistant (26); outdoors; full or part time. Jones, 3 Rochester Place, Camden Town, N.W.

**AS** Dispenser (23); Bradford preferred; qualified; height 5 ft. 11 in.; state salary. Bayliff, Kirkby Lonsdale.

**MANAGER** or Senior; 25 years' experience; good bookkeeper. "Zemo," 21 Hampden Street, Nottingham.

**ASSISTANT** or Junior; aged 21; 8½ years' experience. Full particulars to H. H., 4A Mountfort Road, Strood, Kent.

**AS JUNIOR**; 7 years' experience; age 22; disengaged 24th (after exam.) W. Roberts, 3 Wyndham Street, Brynston Square, W.

**MANAGER**; dispenser; 23; married; permanency; disengaged shortly. By letter, "Chemist," 19 Gough Street, Birmingham.

**DISPENSER** and Bookkeeper to Surgeon or Assistant; Wholesale or Retail; middle-aged; qualified. A. L., 1 Harvoy Road, Camberwell Green.

**JUNIOR** (21); height 6 ft.; no objection to Wholesale; Liverpool or Manchester district preferred. "Beta," Hilsley, Chemist, Barnard Castle.

**ASSISTANT**, aged 22; 5 ft. 8 in.; time for study; London, Liverpool, or Manchester preferred. Marsh, 65 Boutport Street, Barnstaple.

**TO** Manage a Branch; can Extract Teeth, &c.; qualified; married; good Prescriber; aged 40. "Chemious," 14 Gerrard Street, A. Birmingham.

**AS** Assistant in Wholesale house; Wet or Dry counter; experience not registered (35); single; 5 ft. 8½ inches; abstainer. "Hydrarg," Wells, Somerset.

**EVENING** Employment by student at Woodlands; good experience and references; disengaged April 21. Franks, care of R. Chemist, Southsea.

**AS** Junior Assistant; just out of time; passed Prelim.; aged 18; experience in dispensing and retail trade. Apply, S. Kitley, P. Buildings, Bath.

**BRANCH** Manager, or outdoor Assistant; good all-round experience not registered (35); single; 5 ft. 8½ inches; abstainer. "Hydrarg," The Pharmacy, Whitstable.

**IMPROVER**, quick and industrious, desirous re-engagement; indoors or otherwise; experienced in making pills and powders, &c. "Alpha," 60 Mervan Road, Brixton, S.W.

**REQUIRED**, a position of trust by gentleman; many years' office experience in the Drug and Chemical trades; undeniable references. H. E. C., 33 Marlborough Road, S.E.

**A YOUNG** man, thoroughly experienced in the manufacture of Pharmaceutical Preparations and Perfumery, wishes for a London engagement. J. M., 168 Sutherland Avenue, W.

**YOUNG** German, speaking English, seeks situation in the office of Wholesale Drug house by August 1 or September; best testimonials. Address, Z. 773, care of Hausenstein & Vogler, A.-G., Leipzig.

**ASSISTANT** or Manager; Lancashire preferred; over 12 years' varied experience; married; good address, Prescriber. Dispense and references; 5 ft. 10½ in. Address, Mountcastle, La Motte, St. Helier.

**CHEMIST'S SON**, Minor student, requires board and lodging in return for part-time services; near Willis' preferred; aged 22; height 5 ft. 11 in. Apply, A. Taylor, Jan., Eccleshill, near Bradford Yorks.

**COMMERCIAL** Traveller (40), having good connection in Lancashire, South and West of England, also Ireland, wants to represent a good Drug house; highest references. T. M., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**AS** Assistant to Medical Man, or Manager for Chemist; aged 40; married; no family; visit; Dispenser; good Accoucheur; 25 years' experience; first-class references and testimonials. Address "Delta," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**MANUFACTURING** Chemists and Druggists.—Wanted, by Agent, dealing on Wholesale Druggists and Chemists in Belfast, Londonderry, and leading towns in North of Ireland, Agencies for goods of all classes to offer to same; satisfactory references. Address, "Specialist," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**TRAVELLER**, with good and safe connection successfully worked, for 20 years in South Wales, &c., will shortly be disengaged, and open to re-engagement on commission or otherwise; can influence trade for respectable house; thoroughly acquainted with all branches of the trade, wholesale and retail. References and full particulars, "Druggist," 7 Crichton Street, Cardiff.



**AN** Assistant, early in May, in a Mixed country business; not under 21; indoors, and of Christian character. Address, with full particulars, "Esculapins," Evans, Sons & Co., Liverpool.

**BURY**.—Improver, or Junior Assistant, wanted at once, for a Mixed Drug business; must be a good counterman; state terms, &c. Heywood & Co., Chemists, Princess Street, Bury.

**WANTED**, an Assistant, active and trustworthy. Apply, with full particulars of age, experience, salary required, and references, to K. Daykin, Church Street, Ripley, Derbyshire.

**JUNIOR** Assistant (indoors), accustomed to Light Retail and Dispensing. Address, stating age, salary required, previous experience, and references, to "Chemist," 67 Walton Street, Oxford.

**WANTED**, a qualified Assistant, immediately, accustomed to a first-class business; send full particulars (a personal interview preferred). John Bailly, Pharmacist, 5 Pond Street, Hampstead, N.W.

**WANTED**, at once, an Assistant, accustomed to a good-class Dispensing business; state age, height, and salary; send photo, if possible, with reference. G. S. Ball, 1 Albert Terrace, Weston-super-Mare.

**ASSISTANT** wanted; Senior; qualified; must be a quick and accurate dispenser and good counterman; state age, height, reference, and enclose carte. Milton & Soa, Pharmacists, 216 High Street, Exeter.

**WANTED** Assistant, for good-class Dispensing business; two apprentices kept; hours easy; if with knowledge of Dentistry preferable, but not necessary. Send full particulars to F. W. Doubleday, Dorking.

**ASSISTANT** wanted; indoors; must be thoroughly well up in dispensing, and accustomed to a good-class business. Apply, with usual particulars and references, enclosing carte, to S. Rogers, Osborne Road, Southsea.

**WANTED**, a good Junior Assistant; indoors; accustomed to good-class Retail and Dispensing business; state age, height, references, salary required, and enclose, if possible, carte de visite. E. H. Croydon, Chemist, Newcastle, Staffs.

**WANTED**, qualified Assistant, to manage a Branch near London; must be able to extract teeth and prescribe. State salary required, and give full particulars of experience, to "Pharmacist," 1 Wroughton Road, Nightingale Lane, S.W.

**A COMPETENT** Assistant (Minor), for first-class Dispensing and Retail business; must be a quick and reliable dispenser. State full particulars of experience, with age, height, salary required, and enclose photo, to W. Price, Chemist, Eastbourne.

**ASSISTANT** wanted, in Light Retail and Dispensing business; a young man of some experience, decidedly steady, with good moral character, or a married man, if at moderate salary; work light. Apply, "Delta," care of Jackson & Co., Octagon, Plymouth.

**WESTGATE-ON-SEA**.—Immediately, a competent qualified Assistant, of good address, for a first-class Dispensing Business; must be gentlemanly, obliging, and trustworthy. Apply, with height, carte, and references, to F. R. Bessant, Pharmaceutical Chemist.

**WANTED**, at once, qualified Assistant; one accustomed to quick business; abstainer preferred; a permanency to a steady but active man; must be able to take sole charge of Dispensing, sale of poisons, &c.; preference given to a young man. Ince, Dudley, Worcs.

**QUALIFIED** Assistant (outdoors), to take nearly entire charge of a business in a main thoroughfare of the north east of London; a gentleman desiring to retain a permanency preferred; no Sunday duty. Apply personally, if possible, to Christopher Wheeler, 143 Hackney Road.

**WANTED**, about May 1st, an Assistant, with good provincial experience; must be a neat and accurate dispenser, and well up in the business; first-class references indispensable. State age, height, salary, and enclose carte, to Chave & Jackson, Pharmaceutical Chemists, Hereford.

**IMMEDIATELY**.—Smart Junior (Indoors) in good-class Dispensing business; state age, height, salary required, with full particulars and photo (to be returned). Also an Apprentice (passed Preliminary); exceptional facilities for learning the trade. Apply, W. Rowe, 82 Grauby Street, Leicester.

**IMMEDIATELY**, an energetic Assistant, with good experience, for brisk Retail; age about 25; indoors; Sunday evening duty and late hours, in consideration of which a whole day's holiday given weekly. State salary, full particulars, and enclose photo, to "Rex," care of Ismay's, Newcastle-upon-Tyne.

**LABORATORY**.—Old-established firm of London Druggists have a vacancy for a young Chemist who has had a good scientific education, followed by a few years' experience of the manufacture of extracts, small chemicals, and other P.B. preparations, as well as of the purification of heavy chemicals, &c.; liberal terms to a suitable applicant. Address, stating age, experience, and salary required, H., Lynwood Villa, Beaconsfield Road, New Southgate.

**WANTED**, a Foreign Assistant, speaking French and German. Apply, J. Adams, 49 Oxford Street, Southampton.

**IMMEDIATELY**, for good-class Dispensing business, qualified Assistant; ind. ors. Parkes, 193 Belsize Road, Kilburn.

**WANTED**, a Junior Assistant (outdoors). Apply, giving full particulars, to D. P. Roberts, Drug and Chemical Store, North End, Croydon.

**AT ONCE**, good Counterman, indoors, for brisk cash business. Apply, stating experience, &c., to J. H. Lewis, 22 and 24 Great Portland Street, W.

**OUTDOOR** Second Counterman; good-class Store trade. Apply, with references, age, height, salary, and e.d.v., Wand, Haymarket, Leicester.

**MINOR**; indoors; to manage Branch; 1½ hour's Dispensing at local hospital; £50 and commission; good references; photo. Phillips & Worts, Ealing, W.

**WANTED**, qualified Manager, middle-aged, to live indoors, for good Country trade, owing to recent death of proprietor. Apply O., care of Wyleys & Co., Coventry.

**IMMEDIATELY**, a Junior Assistant and an Improver. Apply, stating age, height, experience, and enclose photo (to be returned if not engaged), to J. Johns & Son, Southampton.

**JUNIOR** or Improver for Retail and Dispensing business; good Counterman, obliging and active. State age, height, and salary required, J. Butterworth, 21 Walworth Road, S.E.

**AT ONCE**, qualified Assistant, about 23, to manage Small Branch; also Junior, about 19. State full particulars and salary required, G. H. Bunt (late Lear), 337 Coventry Road, Birmingham.

**PART-TIME** Assistant; board and lodging in return for services; good references required; competent and reliable; close to two schools. Bunker, 135 Great Dover Street, Boro', S.E.

**HEREFORD** General Infirmary.—Wanted, qualified Dispenser; salary £10 a year; board and washing; preference given to one possessing a knowledge of Minor Surgery. Apply, House Surgeon.

**A COMPETENT** Assistant (indoors), about 24; must be well up in Dispensing and accustomed to a good-class business. Apply, stating age, height, salary, and references, to J. Muaday, Chemist, 1 High Street, Cardiff.

**TRAVELLER** wanted, on good commission, to sell to Chemists very saleable article; applications confidentially treated. Apply by letter, 100/20, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**WANTED**, an indoor Assistant, accustomed to good-class trade. State age, height, salary required, when disengaged, how long in last situation, also enclose carte (which will be returned), Morgau, Chemist, Southend-on-Sea.

**IMMEDIATELY**, Junior Assistant, active and obliging; no Sunday duty, comfortable home. Particulars of previous experience, age, height, salary required, &c., and carte, to Smart, Pharmaceutical Chemist, Steyning, Sussex.

**ASSISTANT**; aged about 21; Minor qualification; must be reliable; Dispenser, write a good hand, and have had experience in the best class of trade. Apply, with full particulars, and enclosing carte, to Edward Pearson, Nottingham.

**WANTED**, competent, trustworthy Assistant for central Branch; outdoors. Apply, stating age, height, experience, salary required, enclosing photo (without which applications not entertained), D. W. Bardill, Chemist, Derby.

**IMMEDIATELY**.—A reliable Assistant, with good all-round experience, for a select London business. Apply, by letter, stating age, height, salary (outdoors), and references, 163/6, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**AN** Assistant, about 22, by the early part of May; Light Retail and Dispensing; West; must be energetic, competent, and trustworthy. Write, appointing interview, or enclose photo, with particulars, "Chemist," 2 Fernhead Road, St. Peter's Park.

**LONDON**.—Good Junior wanted for Dispensing and General Retail; pushing Counterman; required to sleep in and board himself for limited time. State terms and experience, to "Hamlin," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**CHEMISTS**.—Wanted, an experienced Chemist, with a knowledge of drugs preferred; will be required to work in laboratory and assist in management of manufacturing business. Apply by letter to "Chemist," care of Mitchell & Co., 12 Red Lion Court, Fleet Street, E.C.

**JUNIOR** Assistant (indoors); must have satisfactory references; one accustomed to a good-class Retail and Dispensing business. Apply, stating age, height, experience, references, and salary required, call or send photo, to "Chemist," 317 Fulham Road, Brompton, S.W.



## BUSINESSES FOR DISPOSAL—Continued.

**FOR SALE.** old-established Retail; light trade; small stock; excellent opportunity. "Veto," 7 Corn Exchange, Sheffield.

**LANCASHIRE.**—Having accepted an appointment, will sell nice small Light Retail Business for value of stock or fixtures, or, if desired, fixtures only; now doing about £7 per week, steadily increasing; easy terms are offered; splendid opportunity for Assistant with small capital. Address, "Chemist," 50 Church Street, Preston.

**PROFITABLE BUSINESS;** Dispensing and Retail; doing between £7 and £13 weekly; immediate possession; neatly fitted; good neighbourhood; opening for Druggist; half an hour from City; very favourable terms to cash purchaser. Address, "Genuine," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**RARE opportunity for Registered Chemist.**—For Sale by Tender, Drug Store Business, situated in principal thoroughfare of cathedral city; good opening for recently qualified Chemist. For particulars and leave to view apply to Mr. Wm. Wetherill, St. Wilfrid's Terrace, Ripon; or Messrs. Edmundson & Gowland, Solicitors, Ripon and Masham.

## BUSINESSES WANTED.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

**WANTED,** a genuine Retail, Dispensing, and Prescribing Business in London; main road preferred, with plenty of scope for increase; cash about £600. Send full particulars, in confidence, to L. Hughes, 53 Arbour Square, Stepney.

**I**N good neighbourhood, within about 60 miles of London, good Retail and Dispensing Business, returning between £1,100 and £1,500; Partnership in large concern entertained, with view to ultimate succession; must bear strictest investigation. Full particulars to O. P., 36 High Street, Guildford.

**WANTED,** genuine Light Retail, Dispensing, and Prescribing Business in the suburbs of London or country town; returns from £600 to £1,000; would not object to a neglected business capable of being worked up; cash ready; references given. "Ebor," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

## PARTNERSHIPS.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

**WANTED,** Gentleman, with moderate capital, as Partner in Chemist's business, a few miles from London, to enable proprietor to attend to dental cases. Address, "Chemists," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**A MANUFACTURING Chemist,** with an established lucrative Business, requires a gentleman Partner, with a taste for Travelling, able to invest £100 and assist in extending the business. Address, "Manufacturer," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**PARTNERSHIP.**—Chemist, in excellent old-established business, of which he has been proprietor for nearly 30 years, is desirous, on account of failing health, of meeting with an energetic young man with a capital of £200 with view to succession. Apply, P., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**VALUABLE OPENING.**—Active Partner, qualified, prepared to invest for extension at least £200 in a successful Retail and Wholesale Business in Manchester; two new and valuable medicinal specialties of much value, largely sold; only *bona fide* applications, stating references, will be entertained. Apply to the International Drug Company (Limited), 159 Stretford Road, Manchester.

## TENDER.

## BOROUGH OF PORTSMOUTH.

**THE URBAN SANITARY AUTHORITY** invite Tenders for the supply of Disinfectants. Particulars, forms of tender, and conditions to be obtained at the Town Hall, Portsmouth, and Tenders, endorsed "Tender for Disinfectants," are to be delivered at the Town Hall not later than 6 p.m. on Tuesday, the 21st day of April, 1891.

ALEXANDER HELLARD, Town Clerk.

Dated 4th April, 1891.

## APPRENTICESHIP.

**APPRENTICE** wanted by firm of Druggists, where there are two shops; a good Christian home is offered to suitable youth, where a thorough knowledge can be acquired; studies superintended; small premium. 19/18, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

## TO LET.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

**TO Chemists and Druggists.**—Shop to Let, in leading thoroughfare, with fixtures and part stock; business of several years' standing; can be entered upon at once by arrangement. Apply, M. Wilkin, 243 Freeman Street, Grimsby.

**TO LET.**—Shop with Wine and Spirit Licences; fixtures suitable for a Chemist's business; large shop, thickly populated neighbourhood, and would have no opposition; a splendid opening; rent low. Apply, care of the Liebig Medicated Wine Co., 25 Lumb Lane, Bradford.

**TUNBRIDGE WELLS.**—Excellent business premises; grand thoroughfare; two shops with house combined; 30 years in occupation of chemist, but suitable for grocery or any other business; moderate rent; lease; small lagging at valuation. B. Pomfret, Valuer, Tunbridge Wells.

**MEDICAL.**—Two places for Sale; lowest price £550 each; would suit Surgeon, Chemist, or Botanic Druggist. 1st, a 6-roomed house, with plate-glass front, surgery fittings, garden and out-offices; used 9 years as a "Provident Dispensary." 2nd, to end of lease, rent 50l.; in hands of present Surgeon, 35 years; over this is "The Hall of Science and Anatomy," from which alone a fortune may be made by fresh energy. Apply Dr. S., 28 Queen's Road, Brighton.

## FOR SALE.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

**FOR SALE.**—Nearly new Mineral-water Machine, by Bratby & Hinchoffe; Gasometer; Generator; 4 enamelled Syrup Pans; about a thousand dozen Bottles, full size and splits; quantity of cases, used two seasons; death cause of disposal; bargains; horse, vao, and harness, if desired. O. Thurston (late Roper), Newent, Gloucestershire.

**FOR SALE.**—One mahogany bent-glass toothbrush-case, 23s.; one 4-ft. 6-in. mahogany wall-case, second-hand, 6l.; 180 gold-labelled rounds and jars, 8l. 5s.; 34 3 lb. blue jars, labelled, 2s. each; one 12 ft. range new mahogany drawers, with glass labels and knobs, 9l.; one 9-ft. second hand counter, panelled front, 40s.; one 6-ft. ditto, 30s.; one 8-ft. ditto, mahogany top, 50s.; one 6-ft. mirror-centre dispensing screen, 6l. 10s.; one ditto, new, 6l.; four 3-gall second-hand corbys with cut stoppers, 9s. each; four 4-gall ditto, 12s. 6d. each; three 6-gall ditto, 15s. 6d. each; two 8-gall ditto, 22s. 6d. each. Richard Tomlinson & Son, medical fitters, Bond Street, Birmingham.

## SITUATIONS OPEN.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

**WANTED,** Outdoor Assistant; qualified; not under 25; General business, Yorkshire. Apply, F., care of Evans, Sons & Co., Liverpool.

**WANTED,** qualified Junior Assistant for a good Retail and Dispensing business.—Apply to W. O. Jones & Co., 23 Bayswater Terrace, London, W.

**ASSISTANT,** qualified (indoors), wanted for Mixed business. Apply, stating salary, with references and photo, Coleman, Chemist, Wolverhampton.

**WANTED,** a steady, reliable Assistant, with Minor qualification; not under 23 years of age. Address, H. S. Icke, 37 Vestry Road, Camberwell, S.E.

**AN Assistant** (qualified preferred), accustomed to Dispensing; good salary to a suitable man. State full particulars to M. N., 42 Cannon Street, London.

**JUNIOR Assistant** (indoors), accustomed to good-class business; state age, height, salary required, and give references. J. Williams, 140 Victoria Road, Aldershot.

**MANAGER** for a first-class Retail and Dispensing establishment in Dublin. Apply to A. R. C., care of Barron, Harveys & Co., Giltspur Street, London.

**ASSISTANT,** about 21 or 22, accustomed to Dispensing. State age, height, experience, and salary required, enclosing photo, to G. Briggs, 221 Woodhouse Lane, Leeds.

**GOOD Junior;** must be quick and accurate dispenser; three assistants kept. State age, height, salary required, and enclose photo, to Johns Rae, Chemist, Newmarket.

**WANTED,** at once, Junior for sea-side business; not under 21; competent to take charge; good references indispensable. Apply, with full particulars, to O. Matthews & Co., Russell Street, Middlesbrough-Tees.



## SITUATIONS WANTED—Continued.

**T**EMPORARY Manager; 20 years' unexceptionable references; London in May; part or whole day. "Chemist," 11 Radnor Place, Plymouth.

**A**S General Assistant; unqualified; good references; moderate salary; total abstainer; medium age. "Ziugheris," 1 Pickering Street, Hulme, Manchester.

**S**ENIOR or Manager; qualified; Scotchman; aged 26; first-class experience and references; at liberty 23rd inst. "Chemist," 53 Edgware Road, W.

**ASSISTANT**; London; aged 20; time for study; good Dispenser; highest references; non-smoker; abstainer. "Pepsalia," The Lilacs, Watlington, Oxon.

**ASSISTANT**; outdoors; Prescribe, Extract; 9 years' experience; 3 years' reference; height 5 feet 9 inches. Terms, &c., to "Tincture," 2 Corporation Street, Barnsley.

**YOUNG** Man requires situation as Junior Assistant: good Counterman; 4 years' experience in good country trade (20); time for study. Palmer, Priddy, Wells, Somerset.

**D**ISPENSER, 14 years' hospital experience, seeks re engagement to Hospital or Doctor; good references. G. Cunning, Ellenmore, Littledown Road, Bournemouth.

**A**S Assistant in good London Dispensing house, with 3 hours a day for study; small salary; Minor qualification; excellent references; aged 30. "Deni," 8 Queen Street, Edgware Road.

**M**ANAGER or Senior; town or country; married, one child; aged 40; quarter-century's experience; excellent testimonials; disengaged. "Rosmorin," 128 Fore Street, Edmonton, N.

**B**RANCH Manager; married; thoroughly experienced; good Prescriber and Tooth Extractor; highest references. "Cheshire," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**C**OMMERCIAL Traveller, having good connection in Lancashire and Yorkshire with Chemists, &co., wants to represent good house; tall, and of good address; references, &c. Apply, M. J., 78 Albion Street, Leeds.

**TRAVELLER**; open to engagement with Wholesale Drug Firm; ground covered, Southern Counties and Bristol to Oxford; well known to buyers. "Taraxacum," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**W**ANTED, by experienced medical gentleman, aged 30, qualified 6 years, going to Upper India next October, place as Manager or Pre.scriber; understands Retail; or would represent wholesale house on salary and commission. Address, "Physic," care of Mr. John Oooke, 18 Markhouse Avenue, Walthamstow.

## MISCELLANEOUS.

*Special charges are made for Advertisements under this heading  
which can be obtained on application.*

**S**HARES for Sale; 50 6 per cent. Preference, 50 Ordinary, in Barclay & Sons, Limited. Offers requested to *Barhill Chronicle* Office, Bexhill, Sussex.

EVERLASTING PERFUMES.

**PRICE LIST** sent on application; large discount for cash; undoubtedly the most economical and non-deteriorating perfumes for exportation. S.A. Freiman, Victoria Grove, Stoke Newington, London, N.

**SPECIALITY.] WAFERS [SPECIALITY.**  
**F**OR Bakers and Druggists, from P. G. Bauriedel in Nuremberg (Germany), Flour Mills and largest Steam Factory of the finest and guaranteed purest, cheapest, and best Wafer Papers; write for samples and prices. Agents wanted everywhere.

PRELIMINARY AND MINOR.

**TULLY'S** method of preparation is without equal; send for particulars.  
 Knotty Points in Latin Grammar, 1s. 6d.; Cæsar Simplified, 1s.;  
 Metric System Simplified, 1s.; How to Write an Essay, 3d.; Equations  
 Simplified, 1s.; Student's Vocabulary, 100 specimens, 7s. 6d., post free.  
 Mr. J. Tully (Hill's prizeman), Chemist, Hastings.

PRELIMINARY AND MINOR.

**STUDENTS!** If you wish to prepare for Examination easily and thoroughly, without leaving business or expending time and money on "correspondence systems" (?), write to Mr. Fittness, Chemist, Crowboro' Cross, Tynbridge Wells, for "How to Prepare for Exam.," gratis and post free. Success guaranteed. No Fee.

## STIBLING'S "MINOR AIDS."

Organic Materia Medica. Concisely tabulated, thus saving much time and laborious reading. In stiff maroon, cloth gilt, post free, 1s. 7d.  
New on Dispensing 3rd Edition. Post free, 1s. 7d.  
Botanical Companion: How to Describe a Plant, &c. Post free, 7d.  
Doses, Sp. Gravities, and Percentages of B.P. 1885 and 1890. Vest-pocket edition. Post free, 6d.  
Sole by H. KIMPTON, 82 High Holborn. All orders by post should be addressed to the Publisher—

GOWER, 4 Lancing Road, Ealing, London (late of Hackney.)

Middlesex College, 40 Charlotte St., Portland Place, W.  
(Established 1885)

The next Course commences April 23th. Fees till June Examination, £4 4s.; till July Examination, £6 6s.

The teaching is of the soundest and most practical character, and each student receives careful individual attention.

The Minor Evening Class meets as usual on Mondays and Thursdays, hours 7 to 10. Fees—Six months, £4 4s.; Three months, £2 12s. 6d.

N.B.—Special attention is invited to the Major Evening Class held on Tuesdays and Thursdays; hours and Fees as for Minor.

F. HUBERT PAINTER, *Principal*.

## EXCHANGE COLUMN.

See page 8.

*Limited to the Advertisement of Surplus Stock, Formulæ, Addresses Wanted, and Articles Wanted.*

[illegible]

If you have no surplus stock to Advertise just now, keep this Form for future use.



## BUSINESSES FOR DISPOSAL—Continued.

**CHEMISTS** and Druggists' Business, with Post Office attached, N.W. district of London; much neglected; takings £11 weekly; populous neighbourhood. Apply, K., Messrs. Hodgkinson, Prestons & King, 81 Bishopsgate Street Without.

**LANCASHIRE.**—A thoroughly genuine Retail and Prescribing Business, with plenty of scope for increase; returns £530; net profits £250; price about £275; fullest investigation invited. "Alpha," care of Messrs. Woolley, Sons & Co., Market Street, Manchester.

**£270.** S.E.—Retail, Dispensing and Prescribing Business; under management; well stocked; returning £378; capable of great increase; rent £40; good house, garden, back entrance; will accept £270. Apply, "Alpha," 4 Douglas Street, New Cross, S.E.

**SOUTH COAST.**—Dispensing, Prescribing, and Retail; Post Office attached; also small Branch with Post Office; price low to immediate purchaser; rent and taxes low; no tea, tobacco, or stationery kept; good opening for Dentistry. Address, "Statim," Mount Pleasant Pharmacy, Hastings.

**LONDON** Suburb.—Light Retail and Dispensing Business in a rapidly increasing neighbourhood; established 12 years; returns £320; owner retiring on account of advanced age; every investigation allowed; price £230. X. Y., care of Messrs. Meggeson & Co., Miles Lane, Thames Street, London.

**I**n the best business town in the West Riding, an old-established Drug Business, at present under manager; good opening for a business man. Nicely fitted shop, and well stocked; to an immediate purchaser £260; rent £37; six rooms in house; good reasons for disposal. "Bromide," Bessdale & Co., Druggists, York.

**HIGH-CLASS** small Dispensing and Retail; best market town; same hands 30 years; net profits over 60 per cent.; rent and taxes £30; best position; patents nil; exceptional private house, garden, &c.; a secure and easy living; lowest price £650. "Shropshire," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**DEATH VACANCY**, sesside, North of England.—To be sold, in consequence of the death of the proprietor, a first-class Retail, Prescribing, and Dispensing Business; returns £1,000 per annum; valuable Proprietaries; every investigation to purchaser; references; moderate price. Apply, "Wilfrid," c/o Evans, Sons & Co, Liverpool.

**MIDLANDS.**—In consequence of ill-health, a Light Retail Business, returning £650 per annum, cash, and showing good profits; first-class position in small town; low rent; numerous specialities for which there is an established sale; excellent opening for Dentistry; price £450. Address "Caryoph," care of Messrs. Wyleys & Co., Coventry.

**LANCASHIRE.**—On sale, small Light Retail, Dispensing, and Prescribing Business; handsomely-fitted shop, in good position in main street; convenient house attached; steadily increasing trade; easy terms are offered; splendid opportunity for Assistant who has small capital, and is desirous of getting into Business. Address, "Chemist," 50 Church Street, Preston.

**LONDON, S.E.**—Old-established Prescribing, Retail, and own preparations; very profitable, and all ready money; busy main road; thickly populated neighbourhood; large, well-fitted shop; good house with private entrance; long lease; two-thirds of rent let off; returns, under assistant, £255, easily increased; price £200, or good offer would be entertained. H., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

## BY PRIVATE TREATY.

**FIRST-CLASS** Dispensing and Retail Business in suburb of Liverpool, doing a genuine and increasing business at good prices; good shop and house (low rental), stock, and fixtures; returns £850 under manager; every investigation allowed; sole reason for disposal death of proprietor. For further particulars apply to Mr. J. P. McKenna, Solicitor, 7 Cook Street, Liverpool.

**NOTTINGHAM** (New Radford).—Messrs. Berdoo & Co. are instructed to sell by Tender the old-established corner Retail and Prescribing Business at 39 Deaman Street, New Radford; returns are £6 weekly at good profits, with scope for increase; good opening for dentistry; shop is well fitted and stocked; 8-roomed house; rent only £25. This is a good opportunity for anyone with small capital. Tenders may be made either by valuation or lump sum, and received up to Saturday, 2nd May. Full particulars and tender forms of Messrs. Berdoo & Co., 30 Jewry Street, Aldgate, London, E.C.

**BRIXTON, S.W.**, 77 Atlantic Road (Death Vacancy).—Messrs. Berdoo & Co. are instructed to sell by Tender the Lease, Goodwill, Stock, and Fixtures of the Light Retail, Dispensing and Prescribing Business, which has been under management the last 18 months; returning £3 to £9 weekly at good profit, as scarcely any patents are sold; shop is well situated in the main marketing thoroughfare; double fronted; handsomely fitted in mahogany; well stocked; nine-roomed house; side entrance; moderate rental, on lease. To an energetic man with small capital this offers a fine opening, as the position commands a trade of at least £800 a year. The reserve fixed is very low, and we recommend it as a desirable investment. Tenders will be received up to Saturday, the 2nd May. Full particulars and tender forms of Messrs. Berdoo & Co., 30 Jewry Street, Aldgate.

**LONDON.**—Genuine Light Retail, Dispensing, and Prescribing Business, in a populous and rapidly increasing neighbourhood; handsomely-fitted and well stocked shop; large and convenient house, £60, lease; books in thorough order; returns last four years, £315, £557, £723, £856; price £800. Address, "Optim," Messrs. Evans, Linsch & Webb, Bartholomew Close.

## BUSINESSES WANTED.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

**BUSINESS** wanted doing £700 to £800 or more, or one that could be increased; reply. Crown Farm, Stagsden, Bedford.

**WANTED**, genuine Retail, Dispensing, and Prescribing Business; returns about £600, with scope for increase. Send full particulars to "Barracks," Ossett, Yorkshire.

**WANTED**, First-class Dispensing and Retail Business, showing from £600 to £800 net profit; cash ready. Apply, X. Y. Z., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**WANTED**, to purchase, for cash, a genuine Provincial Dispensing, Retail, and Prescribing Drug Business, making not less than £400 yearly net profit; all replies considered confidential. Write "Chemists," 3 St. James's Villas, Lower Clapton, London, N.E.

**ADVERTISER** is desirous of purchasing a good genuine Retail and Dispensing Business in or near a good provincial town, and not more than 100 miles from London, returning from £700 to £1,000. A Partnership in a larger concern would be entertained, if with a prospect of ultimate succession. Send full particulars in confidence to "Miaor," c/o Mr. Bishop, 80 Aubert Park, Highbury, London, N.

## PARTNERSHIP.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

**A MANUFACTURING** Chemist, with an established lucrative Business, requires a gentleman with a taste for Travelling, able to invest £100 and assist in extending the business. Address, "Manufacturer," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

## TO LET.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

**To be Let**, in a thriving town in North Wales, with immediate possession, a commodious House and Shop, now occupied by a Chemist; an exceptionally good situation and a splendid opening for an energetic man. Address, T. Jones, 145 High Street, Bangor.

**TUNBRIDGE WELLS.**—Excellent business premises; grand thoroughfare; two shops with house combined; 30 years in occupation of Chemist, but suitable for grocer or any other business; moderate rent; lease; small ingoing at valuation. B. Pomfret, Valuer, Tunbridge Wells.

**CAPITAL** Shops to be let, in an important modern block of buildings at the corner of two main thoroughfares, opposite Walham Green Church; good opening for Dispensary, Bootmaker's, Butcher's, or any retail business. Apply to John Jackson Wheeler, Auctioneer, 5 Sloane Square, and 189 Fulham Road, S.W.

## APPRENTICESHIPS.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

**WANTED**, to Apprentice (indoors) a well-educated Youth, who has passed the Preliminary, to a good class Family and Dispensing Chemist. Address, with full particulars and premium, to S., 40 Park Street, Wombwell, Barnsley.

**To Parents and Guardians.**—Thomas Sellors, Chemist, Coventry, has a vacancy for a respectable and well educated youth as Apprentice; indoors; comfortable home; good opportunity for learning general routine of the business, with good Dispensing experience; must have passed Preliminary; premium required; Churchman preferred.



*Special charges are made for Advertisements under this heading  
which can be obtained on application.*

**TO STUDENTS.**—Thorough and rapid preparation for the Pharmaceutical and Medical Prelims.; very moderate terms; board (if desired). "Virgil," 52 Ivanhoe Road, Denmark Park, S.E.

OLIVE OIL, SALAD, and other ITALIAN PRODUCTS.

**M**ESSRS J. RAU & CO., Leghorn (Italy), desire to engage Agents for the above in London, Bristol, Edinburgh, and other towns of Great Britain; offers, with references, requested.

**A** FIRST-CLASS and well-known  
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and history of the Society, and we have illustrated our notice with authentic portraits of almost all its chosen chiefs during the half-century of its existence. We have endeavoured especially to pay the rightful tribute of respect to the one man (Jacob Bell) who, with such rare tact, patience and devotion, spent himself on behalf of his less fortunate brothers in the same vocation.

William Allen, whose association with the Society at its foundation did so much to ensure its *prestige*, was an old man in 1841, and was then occupied with numerous philanthropic enterprises, which could have left him little spare time. He retained the Presidency of the Pharmaceutical Society till his death, two and a half years later, but it is evident that in that period the lion's share of the work was undertaken by Mr. Bell; while the Vice-President, Mr. Payne physically delicate but intellectually robust, contributed also valuable service.

Mr. Redwood, now the honoured Emeritus Professor, was another of the men of fifty years ago to whom the Pharmaceutical Society and chemists generally are hopelessly indebted. Through the remaining eighteen years of his too brief life, during which Mr. Jacob Bell virtually directed the policy of the Pharmaceutical Society, Mr. Redwood was his loyal right hand. He was more than this. To his insight and pharmaceutical knowledge British pharmacy owed very largely the higher reputation which it won for itself in medical and scientific circles both in this country and abroad. The services of John Savory, Thomas Morson Peter Squire, William Ince, and of several prominent London wholesale druggists, which were given so cordially in the first decade of the Society's existence, cannot be disregarded as we trace its early records. But with a full recognition of the value of the co-operation of so many influential men, it is pretty certain that the permanence of the Pharmaceutical Society and its jubilee this year are due to Jacob Bell. It is this conviction which induces us to give him so large a proportion of our historic appreciation.

Has the Society been a benefit to the trade? and What would have happened if it had not been formed? are questions which occur in reflecting on its fifty years' history. We have no hesitation in answering the first question affirmatively, and we should come to this conclusion the more certainly from a consideration of the second problem suggested. No one conversant with the history of medical legislation during the present century will doubt that Parliament would have insisted on some regulation of the sale of poisons long before this on its own initiative, if necessary. And if there had been no Pharmaceutical Society it is fairly certain that the control of the vendors of poison would have been committed to the Medical Council. How this might have affected chemists and druggists pecuniarily cannot be estimated: sentimentally the rule of the Medical Council would have proved intolerable. Pharmacists may sometimes claim to be an integral part of the medical profession; but whatever the expression may mean at public dinners or on full-dress occasions, it certainly has never meant a willingness to submit complacently to the authority which, it must be added, our allies have always been ready to assume.

The generation which furnished the men who founded the Pharmaceutical Society has, to a large extent, passed away. The names of less than a score of the founders appear as stewards of the forthcoming jubilee dinner. As representatives predecessors who associated themselves at some personal sacrifice in the hope of benefiting their successors, these men are worthy of our hearty respect. As far as we know them, the chemists and druggists of fifty years ago were a fine body of men. Not long ago Mr. Carteighe, in a public speech, rightly refused to assume that the pharmacists of

the present day were as superior to their forerunners as, with their advantages, they ought to be. It might be, he said, that the body had advanced, but, thinking of such men as those we know of—the men who founded the Pharmaceutical Society—he, for one, was not prepared to say that we produced better samples now. This opinion we endorse. Our chemists and druggists are now compelled by law to attain a certain standard, and this perhaps ensures our aggregate improvement; but it is very doubtful whether our compulsory system has developed a larger proportion of high-minded, conscientious pharmacists than is told of in the days when anyone might, if he liked, assume the title and functions of a chemist and druggist. To put the matter pertinently, we may ask: Are there as many "historic pharmacies" being founded now as in the earlier years of the century?

### DR. STEVENSON'S REPORT.

DR. THOMAS STEVENSON, the Government visitor to the Board of Examiners for England and Wales, wastes little time in sending in his reports. That for the year ending March 31 was deposited with the Privy Council a day or two thereafter and forwarded to the President of the Pharmaceutical Society on April 6—only a day or two later than last year. Instead of placing it before the Council the President has on this occasion chosen the *Pharmaceutical Journal* as his medium for publicity.

In spite of all we hear about the drug trade going to the dogs, the number of persons entering it suffers no serious diminution. There were 1,355 candidates for the Preliminary examination last year, showing a trifling decrease; but 594 of these succeeded in getting over the stile, and that, we take it, is more than enough to meet the wear and tear of the trade. The number of failures, 761, is large, and on the face of it does not appear at all encouraging, especially when we look into details and find that 655 of the 761 who failed could not take 40 per cent. of marks in arithmetic, or, as Dr. Stevenson puts it, six out of seven of the rejected candidates failed in this subject. This does not mean that there were only 106 failures in Latin and English, for we take it that although Dr. Stevenson does not give us figures this year, the failures in these two subjects have been about their normal—in each case three-fifths of the arithmetic failures. Dr. Stevenson speaks about "elementary arithmetic." We should like to know what he means by that. It cannot be the arithmetic of the Preliminary examination of the Pharmaceutical Society of Great Britain, which is one of the most difficult papers set in the subject in this country. In the first place, the paper contains seven questions, for which ninety minutes are allowed. The working of the answers to the questions has to be written out in full, which takes up much of the time. Then the questions take in a wide area of knowledge—viz., the simple and compound rules, generally two questions; vulgar and decimal fractions, three questions; the metric system, one question which does not deal with values alone; and always there is one of those tricky questions which try the mental powers of the candidate to the utmost. Here is an example as set in July last:—

"A stationer sold quills at 11s. per thousand, by which he cleared  $\frac{3}{4}$  of his purchase money, but raised them to 13s. 6d. per thousand on their growing scarce; what did he clear per cent. by the latter price?"

Questions such as this are not uncommon, they are far from being elementary and their presence in the examination paper simply means so much deducted off the candidates' chance of passing. It is perhaps to be regretted that the



Boards of Examiners have surrendered the entire control of the examination to the College of Preceptors. As far as our information goes the Boards simply receive the results; the questions set never come before them for approval, although the responsibility rests with them. It would be a decided advantage if the Boards exercised some control over the papers, especially in the direction of giving less work for the ninety minutes. This is very much wanted, for it is not mere ignorance which determines failure. Natural slowness accounts for something and is a factor which should be provided against.

The figures for the Minor examination are more cheering than those of the Preliminary. There were 919 candidates, of whom 381 passed and 538, or 58.5 per cent., failed, as compared with 61.5 per cent. of failures in 1889. Year by year the improvement in the curriculum subjects increases, as the following figures show:—

	1883	1889	1890
Failures, total .. ..	468	492	585
" in chemistry .. ..	90	79	69
" botany .. ..	29	25	20
" materia medica .. ..	67	50	67
" pharmacy .. ..	59	76	93
" prescriptions .. ..	44	51	67
" dispensing .. ..	114	154	196

We called attention three years ago to the fact that in the very subjects upon which the Pharmaceutical Council are urging a compulsory course of study candidates are strongest, and are steadily improving. That statement is as applicable to-day as it was in 1888. Up to then there had been improvement, and it has continued since. In spite of this fact, of which he is perhaps not fully cognisant, Dr. Stevenson says in his report:—

"In chemistry the lack of systematic training and manipulative experience are patent. Indeed, too often it is manifest that the candidates have had neither proper teaching in the theory of the science nor laboratory instruction.

"So long as no course of instruction is obligatory this state of things may be expected to continue. I trust, however, that at no distant date pharmacists will recognise that the interests of their business will not be in conflict with public opinion, that the accurate study of the sciences bearing on pharmacy is indispensable.

"I desire to express my sense of the thorough and careful manner in which the examiners carry out the responsible duties entrusted to them. If my criticisms seem severe, they are directed rather to the defects in the training of candidates than to the examinations themselves."

Obviously, Dr. Stevenson warmly supports the compulsory curriculumists, thus reversing the policy of his predecessor, the late Dr. Greenhow; who, after much longer experience of pharmaceutical candidates and the public requirements of pharmacy, was decidedly of opinion that the Minor examination alone was an adequate and safe test of fitness for exercising the functions of the chemist and druggist. The failures in chemistry now do not warrant any change of view, and the pharmacists whom Dr. Stevenson so directly addresses, as well as the Privy Council representing the public, have a right to ask him if any of the 850 candidates who passed the examination in chemistry were unsafe men. It must not be forgotten that the State does not require Minor candidates to be as proficient in the science of chemistry, as, say, bachelors of science: enough to make the custodians and sellers of poisons fit for that position is all that is wanted. Looking at the results in chemistry, as well as in botany and materia medica, the advocates of higher education have every reason to be satisfied, and if legislators do not meet their views in regard to compulsion, they may look

to the new examination schedule as a means of producing that thoroughness which they desire.

The most serious part of Dr. Stevenson's report is that in which he comments on the failures in shop subjects. He says:—

"The large number of failures in prescriptions and in dispensing is significant, these being the two branches of examination which are most practical and most important in the interests of the public. The ability to read and properly interpret prescriptions, and accuracy and care in the dispensing of medicines, are rightly deemed all-important. I have observed that a considerable number of failures are brought about by mistakes as to quantities of potent drugs and poisons. Such errors are inexcusable, and rightly lead to rejection."

The fluctuations in dispensing within recent years are alarming, undoubtedly. We drew attention to the matter in 1886, when failures in dispensing comprised more than one-third of the total number of rejections. In 1887 the failures in this subject fell from 28 to 34 per cent., in 1888 to 24 per cent., then in 1889 there was an increase to 31 per cent., and last year to 36 per cent. of the total number of failures. The immediate result, therefore, of the improvement in the manner of conducting the dispensing, introduced in 1889, has been an increase in the failures. Candidates now get a larger selection of work, and more time to do it in, thus giving them better opportunity of showing their skill. Apparently it has also enabled the examiners to more abundantly detect want of skill. The shop subjects come out altogether badly, the failures indicating that apprentices do not receive proper training. It may be that the want of a reasonable interval between the Preliminary and the Minor is to blame, and it may be that the three years, which the Pharmacy Bill proposes, will counteract the evil; it is, at least, a sound principle to go upon to recognise the Preliminary examination as the entrance to the calling, and to make the three years' engagement in dispensing medical prescriptions date from that. But the gravity of the matter, as it stands, is no less lightened by the prospect of reform, for at present a large majority of those who pass the Preliminary examination are schoolboys, or have recently left school, and but a small percentage is made up of those who are out of their teens. Moreover, every Minor candidate has at present to produce a certificate of having dispensed for three years. The ideal conditions, therefore, practically obtain now. What more, then, can an Act of Parliament do for us? Is there not something to be done amongst ourselves? Better training of apprentices, better regard for the conditions of their service, and a little more of the old-fashioned respect for the honour which attaches to turning out well-trained lads? The weakness in the shop subjects is really the serious part of Dr. Stevenson's report, and, if this is not the result of increased stringency on the part of the examiners, he is none too severe regarding it. Pharmaceutical Councils, Boards of Examiners, and Houses of Parliament can do little to remedy it: masters themselves must look to the matter.

## THE AMERICAN PHARMACEUTICAL ASSOCIATION.

FROM Volume 38 of the "Proceedings of the American Pharmaceutical Association," which we have recently received, we observe that American pharmacists are more particular than their *confrères* on this side of the Atlantic in recording all that takes place at their annual gathering. It is not easy to ascertain exactly what the membership of the British Pharmaceutical Conference is. Perhaps the



executive itself does not know, for the annual report mentions not the number. We judge from the subscriptions paid that it is 1,406 or thereabout. The American association gives the actual figures of its strength—1,367 “in good standing.” That was how it stood when it met at Old Point Comfort, Va., last year. In view of the next annual meeting, which will be held in a few weeks, some statistics regarding the association are not without interest. It will be remembered that the association is to visit the Sunny South on April 27. New Orleans has given the members a hearty invitation, and as they have been going to extremes of late years they are to give that city a trial before the yellow-jack season comes on. The first meeting of the association was held in Philadelphia, Pa., on October 6, 1852, and meetings have been held without interruption annually ever since, but none so early in the year as April. The number of the volume before us indicates that the association has published “Proceedings” every year, and bulky though they be nowadays, and have, indeed, always been, funds have gradually increased until the investments now amount to \$11,794.46. The accounts submitted at the last meeting were excellent, but they slightly belie the report of the committee on membership, a sum of \$5,585 having been received in fees for 1889 and 1890, an amount which represents 1,117 members. Fees for years before and after these only add forty-eight to the membership. The total income of the association for the year was \$7,452.48, of which \$1,224.98 was derived from the sale of the National Formulary, a venture which has paid exceedingly well (it is two-thirds profit). Amongst the disbursements we find Professor John M. Maisch, the general secretary, credited with \$750 salary and \$205 travelling expenses; Mr. Diehl, the reporter on the Progress of Pharmacy—*i.e.*, the editor—gets the same salary; and the treasurer’s salary is \$600. Other salaries bring the total under that heading to \$2,300 (460%). Our own Conference disbursements of less than 200% per annum for salaries appear modest in comparison, and it is not surprising that when a committee was appointed to consider how the expenses of the American association might be controlled so as not to exceed the income from annual fees, the first thing proposed was a reduction of salaries all round. The members, however, would not hear of such economy, but agreed to savings equal to \$150. It is not surprising that the committee’s report was mainly negatived. The association’s income at present exceeds its expenditure, this circumstance having been brought about by the sale of the National Formulary, and there is no immediate necessity for retrenchment. The most costly item in the accounts is the “Proceedings,” the printing and binding of which is put down at \$1,977. This item is in striking contrast with the kindred line in the accounts of our Conference. We take it that each association prints about an equal number of copies. The American work is much bulkier than the “Year Book,” having 850 pages to the latter’s 550, and much of the matter in the former is in smaller type. It would be fair to say that the American volume contains about twice as much matter as the British one, yet an edition of the latter costs \$1,480 to print. Where British smartness comes in is in getting \$550 worth of advertisements. Go-ahead as the Americans are, they have not got that length yet. There seems to be no branch or phase of pharmacy which the editor of the American “Proceedings” does not touch—from the fitting of a shop or the dressing of a window to improvements in percolation and the latest knowledge regarding the constitution of alkaloids. The volume for 1890 is illustrated—we cannot say copiously, the number of cuts being under fifty—and the work put into the editing is such that we should say the salary of Mr. Diehl is the last item of

expenditure which should be reduced. He exercises great catholicity in the selection of material, the literature of Europe furnishing the greater part of the abstracts, and, we may say, the more valuable parts; for American pharmacy is not at its most brilliant epoch at present. There are good men in it, but they all appear to have taken to their scientific coffins, and there is no evidence of living Parrishs, Proctors, or Rothers in it to continue the record which the founders of American pharmacy began. Considering that the majority of American pharmacists are college-bred men, it is surprising that no pharmaceutical research of first importance has been published since the last meeting of the association, and even the papers read at that meeting were, as a whole, of secondary importance. It is hopeless to expect the State associations to gather the first order of workers around them; the place for them is the National Association, and it would be good for American pharmacy if its votaries would give anti-cutting plans a rest for a few months and devote themselves to percolators and retorts. The plans are at present getting all the attention, and higher pharmacy little or none.

## FLOODING THE PRODUCE MARKETS.

NOT the least interesting among the results of the immense expansion which the boundaries of our empire have undergone in Africa and Asia during the last five years, and of the extraordinary revival of the feelings of kinship among the scattered parts of the Empire are the numerous schemes to render the outlying portions of Greater Britain more productive and to utilise their latent resources to a greater extent than heretofore. To say that, from climatic and economic standpoints, there is scarcely a natural product which cannot be produced within the limits of the British dominions is a truism so trite that we almost apologise for repeating it, and general sympathy with all efforts to increase the productivity of any part of the Empire and enhance the well-being of its inhabitants, may be similarly assumed. But enthusiasm for Colonial development has its dangerous side. And to no one should the reverse of the medal be more apparent than to the produce merchant, who with an intelligent interest keeps himself informed of the new sources of production of the raw materials of industry, and compares their probable supply with the demand which may fairly be expected for them. The drug importer in particular enjoys unusual means of observation on this point. No other merchant draws his raw materials from so many sources, and there is probably no other trade in which the grades of usefulness of any given article, from the almost absolutely valueless to the highest excellence, are liable to vary so much as in his.

To the produce importer, who sees the probability and often actually experiences the difficulties attending the glut of his market by the introduction of new developments of enterprise, the proverbial benefactor who enriches the world with that often-mentioned additional blade of grass, is not always so welcome as he expects to be. The authorities of the Royal gardens at Kew, who are doing eminently useful experimental work in connection with the acclimatisation of produce, are not free from the risk of allowing their zeal to outrun their discretion, from the importer’s point of view. It may be suggested even to them that in selecting their now investigations they might at least first ascertain approximately the world’s requirements and capabilities of absorption. A case in point has occurred this week. Before the Royal Colonial Institute, on Tuesday night, Mr. Morris, the energetic assistant-director of Kew Gardens, read an



interesting paper on the "Leeward Islands"—that little group of western paradises entwining the Caribbean Sea with a girdle of fragrant verdure. Mr. Morris has previously spent many years in botanical pursuits in the Antilles, and has just returned home, filled with re-awakened memories of the unexhausted fertility of the Antilles. He talks of their wonderful productiveness, and urges the investment of a "moderate amount" of capital in their development. Dominica produces annually about 8,000*l.* worth of lime-juice; and in Montserrat a thousand acres are covered with lime plantations. The profits, as a communicative planter rashly explained to him, as it were with a view of inviting others to come and compete, are large. An outlay of 1,000*l.* will establish a 20-acre plantation in full working order, with works and plants complete, and defray the expenses of supervision for seven years. At the end of that time the estate would yield at the rate of 40 hogsheads of concentrated lime-juice, worth 40*l.* each, or 480*l.*; while the yearly cost of cultivation and manufacture would be about half that amount, leaving 240*l.* as the net annual profit. If the industry is such a profitable one at the present time, the happy lime-juicers of Dominica had better rest content in their modern Arcadia, instead of bragging of their gains to the promiscuous visitor; but what prospect is there, we ask, that this rate of profit would be maintained if, say, the acreage under cultivation were doubled or trebled? So with gambier. The Kew authorities have lately been paying special attention to this valuable tanning material, and numerous attempts at its propagation are being made in the West India islands. The United States being among the largest consumers of gambier, it is certainly reasonable to expect that, if they could obtain it as cheaply at their own doors, they would not go to the Straits Settlements for it. But while we do not say that there is not room for an increased output of gambier, it should be borne in mind that its manufacture in the Straits Settlements is practically a monopoly of the Chinese, who have thus far been the only people who can make the culture pay. What Chinese competition would mean, if it is a question of producing cheaply, there is no need to particularise. Are our West Indian colonies prepared, at a time when Australia and the States are compelled to exclude Chinese from their labour markets, to rush in where the European planters of the Straits Settlements have hitherto feared to tread? It is not quite enough that the warm moist valleys of Dominica are likely to suit the gambier-plant in every way. The question is, whether the planters there could face the possibility of a fall in the value of the manufactured product to say 10*l.* per ton, instead of the 40*l.* which it realises now. Again, we are informed that "spices, such as nutmeg and mace, vanilla, black pepper, cubeb pepper, long pepper, cloves, ginger, cinnamon, cardamoms are already introduced into this part of the world. The demand for spices is increasing, and these islands could grow every one of those mentioned, if only the people would give their attention to them and treat them according to their special requirements." But is it not a fact that the cultivation of nearly every one of these products is already, if not overdone, at least so fully provided for that further competition can only prove disastrous from a financial point of view? Pepper, for instance, is almost exclusively produced and brought into commerce by Chinese cheap labour; vanilla is a product the cultivation of which requires not only unremitting care but a dexterity only to be acquired by practice, and any considerable addition to the production of Mauritius, the Seychelles and Mexico, would send prices down to the lowest verge of remunerativeness. The commercial history of cubebs

records price-fluctuations from 35*s.* to 30*l.* per cwt. within a few years. The increase in value of the article has led to an enormous extension of cultivation in Java, and the value of the drug—which, it should be remembered, is one of comparatively small significance—has fallen 100 per cent. within the last few months, while the exports from Java have risen from 118 piculs in 1888 to 1,373 piculs in 1890. Essential oils scarcely offer greater promise. With those which are produced in France and Italy it would require not only a considerable capital, but also a vast fund of practical experience to cope. Our knowledge of the chemistry of essential oils is as yet so limited, and adulteration so difficult of detection that buyers are compelled to rely very largely upon the honour and commercial reputation of the growers with whom they deal; hence custom and prejudice prevail in this trade to an almost incredible extent. A slight innovation—often of the nature of an undoubted improvement—in the packing of an essential oil is usually sufficient to render the sale of the new product unremunerative, as anyone knows who is acquainted with the wholesale markets. Oils of lavender, eucalyptus, peppermint, geranium, clove, rose, petit-grain, to mention only a few at random, are already distilled in quantities which would render any further competition ruinous.

We have no desire to dissuade Colonial planters or intending investors of capital in Colonial enterprises from carrying out their intentions; we only ask that they should consider the possibility of finding a market for their product before they lay out their plantations. Otherwise it is clear that within a few years the produce markets of the world will be flooded with merchandise from the newly-acquired or commercially-revived colonies in all parts of the world, for which there will be no outlet, and the disasters of the cinchona and shellac markets must inevitably be repeated on a larger scale than before.

#### UNIFORM IMPERIAL POSTAGE.

THE Imperial Federation League have published a pamphlet written by Mr. Robert J. Beadon, M.A., ably advocating a uniform postage for every part of the British Empire. The policy of the League is to link by all available considerations of interest and sentiment the populations in all parts of the British dominions, and in the advocacy of this programme postage rates offer a very important field of operations. It is scarcely credible that until this year, 1891, the cost of postage of letters from France and Germany to India was half that charged from England. This anomaly has been remedied, but much more remains to be done, and it is a matter of commercial importance to Great Britain that every possible facility for communication with all probable customers should be provided. Mr. Beadon argues that it is quite possible to extend home-rates throughout the Empire,



with but little, if any, loss to the Post Office. To accomplish this he urges that the subsidies to mail steamship



lines should be charged mainly as they formerly were on the Navy Estimates—the Lords of the Treasury having expressly declared that this expense is “not justifiable upon postal reasons alone.” Then he would have the British Post Office press for modifications of the unreasonable terms charged by France and Italy for the conveyance of mails to Brindisi; and, finally, he proposes that something nearer freight-rates should be obtained from the ship companies. He shows, by an elaborate set of figures, that double first-class cargo rates on the most costly passage would still be less than a third of the amount now paid for all sorts of mail goods, letters, books, and newspapers put together. Mr. Beadon's pamphlet may be obtained for 6d. from Messrs. Cassell & Co., who publish it for the Imperial Federation League. The engraving preceding represents the stamp which the author suggests, not in lieu of any existing one, but as an additional one capable of being used in the Mother Country and in every British colony and dependency.

### COMMENTARY.

**REDDENING OF CARBOLIC ACID.**—Krämer and Spelkir have found a new body in coal-tar, which they call indene,  $C_8H_4 \cdot C_2H_2 \cdot CH_2$ . They isolated it from crude benzol as a picrate. They say that the red coloration of naphtholin when treated with sulphuric acid is due to the formation of indene, and it is probable too that the red coloration of carbolie acid is allied to this. We do not seem to get to the end of the causes for carbolie acid becoming red. The red colour does no harm, it does not lessen the efficiency of the acid, and few pharmacists or physicians think anything about it, yet we are always getting some new explanation. No two chemists agree about the cause, and none have yet shown how to prevent the coloration.

**CRYSTALS OF PLATINUM.**—Professor Joly, of Trinity College, Dublin, announces in *Nature* that he has succeeded in producing small crystals of platinum by stretching ribbons of pure metal, sprinkling them with powdered topaz, and passing an electric current through the metal until it is red hot. In half-an-hour, if the metal is examined under the microscope after removal of the topaz, it is found to have small and brilliant octahedral crystals adhering to the edges. Other forms also occur. Professor Joly says that the cause of the formation of the crystals is that fluorine is liberated at a high temperature from the topaz, which attacks the platinum, forming a fluoride, which again breaks up, depositing the crystals. This reaction is similar to what M. Moissan has already described. The same thing takes place with palladium.

**THE OWNERSHIP OF PRESCRIPTIONS.**—A correspondent of the *British Medical Journal* states that the question of the ownership of prescriptions has been settled by law in New York, Massachusetts, and a few other States, to pertain to the druggist. The following is given as the text of a recent judicial pronouncement on the subject, where is not stated:—

The question before the court seems to be very simple indeed. A patient applies to a physician, and receives from him certain advice, for which he renders a fee. The physician hands a piece of paper to the patient, purporting to be a written order for certain goods called drugs, which order is filled by a merchant or apothecary. The payment of the fee and the delivery of the goods or drugs terminates the verbal contract, and the druggist keeps the prescription as no evidence that the contract has been fulfilled so far as he is concerned. The druggist can, if he so please, on his own responsibility renew the drugs, for he is but a merchant, and has a perfect right to sell drugs to anyone and in any shape. He need not keep the prescription, nor is he bound to give a copy; but should error occur, he has no protection in case of suit.

It is said that some time ago a decision in the same sense, was given by the judge of a court in Berlin. Our contemporary, however, properly refuses to recognise such a ruling as sound; the patient receives the prescription in return for the fee which he gives to the physician, but he is under no obligation to give up the prescription to the druggist. He is bound to show it to him, or else he cannot get the drugs he wants, but the document belongs to the patient, who could, if he chose, enforce its return by action. A publisher might as well claim to keep an author's manuscript as evidence that he had correctly printed it, as a druggist to keep the prescription as evidence that he had fulfilled his contract to supply the drugs ordered of him.

**THE ADULTERATION OF MUSK.**—Mr. Th. Winimel, of Hamburg, writes to the *Apotheker Zeitung* on the subject of musk-adulteration as noticed by him. The musk which he examined was a bottle of grain musk bearing on its label the words “15 oz. Thibet musk, pure grains.” The seals were intact. The contents consisted partly of small globules from the size of a pea downwards, and partly of a homogeneous mass of small grains, mixed with a considerable quantity of hard white hairs, some nearly an inch long, others smaller. Under the microscope the globules, especially when moistened with turpentine, showed the formation of layers characteristic of true musk, but they proved to contain a certain admixture of starch granules, some free, some surrounded by a tender transparent coating. Vegetable cellular tissue was also present, indicating the use of a ground amylaceous seed as an adulterant. The colour was an even dark brown, and the flavour exceedingly penetrating. Dried upon the water-bath the musk lost 51 per cent. in weight, and upon incineration left behind only 2.5 per cent. of a grey ash. Mr. Winimel's conclusion was that the musk was adulterated with vegetable matter (principally starch-flour) to the extent of 25 per cent., and moreover weighted with water. Mr. Winimel does not state what price he paid for the “musk,” which surely is a point of importance. It may here be stated that musk of the character referred to by him is regularly met with at the London Drug Auctions, and, though in grain, is considered worth much less than known pure musk in pod. So far as the wholesale market is concerned there is scarcely any possibility of anyone being deceived in the purchase of musk of this character. Mr. Winimel also gives some particulars of the loss in weight in pod musk by drying, which he had found to vary from 6 to 35 per cent. The musk obtained from one pod which he opened lost 28 per cent. in weight by drying. The German Pharmacopœia is silent upon the question of humidity of musk, but other Pharmacopœias demand that musk dried over sulphuric acid shall not lose more than 12 per cent. The ash residue of musk, according to the German Pharmacopœia should not exceed 8 per cent.

**THE ALKALOID FROM THE TUBERCLE BACILLUS.**—Although Koch says that his fluid does not contain a ptomaine, it does not follow that the tubercle bacillus does not evolve one. Indeed the announcement is made that Professor Zuelzer has succeeded in obtaining one by treating hydrochloric acid extracts of tubercle cultures with platinic chloride, and splitting up the double salt formed. In this way an almost white crystalline salt was obtained, which was easily soluble in hot water, but with great difficulty in cold. Its solution was light yellow in colour. After keeping for some time the dry salt assumed a light-brown colour. The chloride when injected into rabbits and guinea-pigs exhibited a characteristic toxic action; about one centigramme injected subcutaneously produced, after from 3 to 5 minutes, an increase in the frequency of respiration, the



movements reaching 180 per minute. This continued for about a quarter of an hour, when the rate gradually became slower. The temperature rose in two out of the ten observations from normal to 100.2° F. Another constant symptom was well-marked protrusion of the eyes, which also appeared bright and shining, with somewhat dilated pupils, which appearances disappeared in from 15 to 20 minutes. Toxic symptoms only showed themselves in three rabbits, and these had received somewhat larger doses, between two and three centigrammes having been administered. Death usually occurred somewhere between the second and fourth days. At the site of injections there was considerable redness, and small hæmorrhages were found in the muscles immediately beneath. It will be noted that the symptoms produced are not unlike those of Koch's tuberculin. We may remark regarding that fluid that a 1-per-cent solution of it gives a turbidity with platinic chloride as well as with auric chloride.

**TITLES IN PHARMACY.**—They are at present exercised about titles in the United States: "boss," "clerk," and "boy," suffice to describe the three grades who work in the pharmacy; but "boss" is more familiar and general than respectful. No one thinks of designating himself as such, "pharmacist," the happy title coined in 1865 by Professor Parrish (it is said), being the favourite title "in conjunction with that of 'proprietor.'" Where the difficulty comes in is with the clerk and the boy. For the former Mr. A. E. Ebert proposes the title "prescriptionist" as being better than dispenser, assistant, or clerk; and doubtless the junior clerk or boy will feel proud of his new designation, "laborist." For "it is believed," says the *Western Druggist*, "that the adoption of such a title would tend to elevate the 'junior clerk' to a better appreciation of his duties and responsibilities—that he would take more pride in his work in order that the distinction may really be warranted and promotion to the next grade be stimulated." All this is said, we may explain, in perfectly good faith and with a due degree of solemnity.

**NEW SOURCE OF OXALIC ACID.**—A Prague chemist has devised a process for recovering oxalic acid from the waste liquors produced in manufacturing wood fibre by the sulphite process. It is found that 100 parts of waste liquor give an average of 12 parts of dry residue on evaporation, which contains 9.5 parts of organic and 2.5 parts of mineral matter. The filtrate, which contains chiefly lime salts, besides the organic matters, is mixed with more than sufficient sulphuric acid to combine with the lime, the action being continued until all free and combined sulphurous acid is expelled, which may be condensed and utilised if desired. If any excess of sulphuric acid has been added, it is removed by carefully neutralising with lime or chalk. After settling, the purified liquors are concentrated to about 40° B. sometimes to dryness. While still warm the mass is mixed with double its weight of a mixture of 2 parts of quicklime and 1 part of caustic soda. This mixture is heated, with constant stirring, in iron vessels to a temperature of above 180° C., whereby it is changed into oxalic acid, which combines with the bases, and is afterwards purified.

**FLASH-LIGHT FIRE-ALARM.**—A Copenhagen gentleman proposes to utilise the flash-light as a fire-alarm. His arrangement consists of a small cartridge filled with Bengal-light composition, and provided with a fusc made from potassium chlorate and sugar. On the fusc is a paraffin capsule containing sulphuric acid. When the temperature of the room rises above the melting-point of paraffin, the sulphuric acid is liberated and ignites the mixture of chlorate and sugar, which in turn sets fire to the Bengal-light.

## SHOP ETYMOLOGY.

By HEDER.

AN amusing and instructive exercise can always be obtained for a spare hour by the study of a few words in such a book as Skcat's, to which reference was made by one of your correspondents last week. I propose to take some very "shoppy" words, and trace their origin or their passage through stages until we have them in common use. The extracts will be condensed as much as possible and the following abbreviations used:—

A.R. Aryan root; Skt. Sanscrit; E. English; M.E. Middle do.; A.S. Anglo-Saxon; G. German; C. Celtic; F. French; O.F. Old do.; Ital. Italian; Span. Spanish; L. Latin; L.L. Low do.; Gk. Greek.

1. The Shop.—Shop (E.). A.S. *scoppa*, a stall, booth. Allied to *scypen*, a pen for cattle. "Shippen" (a cow-shed) is in constant use in the Midlands. Allied forms are: L.G., *schup*, a shed; G. *schuppen*, a shed, covert; whence O.F. *eschoppe*, a shop. Compare with the Gk. *skapas*, a cover.

Counter (F.), the reckoning place. F. *comptoir*, from *compter*, later *conter*. Allied to L. *computare*, to compute: from *putare*, to think; originally "to make clean," then "to make clear, to come to a clear result." L. *putus*, clean. A.R. PU.

Shelf (E.). M.E. *schelfe*, *shelfe*, A.S. *seylfe*, plank, shelf; originally a thin piece, a flake; allied to "shell" and "skill." Low G. *schelfern*, to flake off. "Squill" has been mentioned as another derivative. A.R. SKAL=SKAR, to cut.

Drawer (E.). M.E. *dracen*, to draw; A.S. *dragan*; allied to Skt. *dhraḡh*, to lengthen, to exert oneself. A.R. DHARGH. Connected with the shop are—

Cellar (F.—L.). M.E. *celer*; O.F. *celier*; L. *cellarium*, *cella*, a small room, a hut. Compare with L. *celare*, to hide. A.R. KAL.

Warehouse (E.). M.E. *warc*; A.S. *warc*; pl. *waru*, wares, probably valuables; allied to A.S. *waru*, protection, guard, custody.

House (E.). M.E. *hous*; A.S. *hús*. Compare Skt. *koṣa*, *koṣa*, a coop, sheath, abode.

2. The Shopkeepers.—"Chemist" and "druggist" have been given by Mr. Scaton.

Assistant (F.—L.). As for *ad*, to; *sistere*, from *stare*, to stand; to step to, to stand to, to approach, to assist.

Apprentice (F.—L.). From a dialectal French form, such as the Walloon *apprentiche*, from Low L. *apprenticius*, a learner; from *ad*, to, and *prendere*, for *prebendere*, to take hold of, to learn.

Porter (L.), a carrier, from *portare*. A.R., PAR. "Porter" is substituted for M.E. *portour*, from F. *porteur*.

Errand-boy. Some disappointment in this word. One naturally expected to find it derived from L. *errare*, to wander, or make a mistake. But it comes from M.E. *errende*, A.S. *ærende*, a message, business, a going, from A.R. AR, to go.

Boy (Old Low G.). M.E. *boy*. Allied to G. *bube*, a boy; L. *pupus*, a boy, whence "pupil."

With these may be mentioned—Buy (E.). M.E. *buggen*, *biggin*, to purchase. A customer yesterday used a word also derived from the same root: "I can't abide the smell of your drugs"—"Abide" meaning to suffer, pay for, or endure.

Sell (E.). A.S. *sellan*, *sillan*, *syllan*, to hand over. A secondary verb derived from *sale* (Scand.), a sale or bargain.

3. Money.—"The love of money is the root of all evil." Wise or otherwise, the warning is good. *Moneta* (from L. *monere*, to warn), the Warning One, was a surname of Juno, in whose temple at Rome money was coined. "Money" is F.—L. M.E. *monie*, from O.F. *monie* (F. *monnaie*). "Mint" is A.S., borrowed from L. *moneta*.

Pound (L.). From *pondus*, a weight. M.E. *pund*; A.S. *pund*. Probably at first, the weight.

Sovereign (F.—L.). The royal coin. O.F. *souverain*, from Low L. *superanus*, chief, princely. L. *super*, above.

Crown (F.—L.). M.E. *corone*, *coroune* (whence *crowne*). From O.F. *corone* (F. *couronne*). L. *corona*, a wreath. Allied to Gk. *koronis*, *koronos*, curved.

Florin (F.—Ital.—L.). About A.D. 1337. A coin of Florence



bearing a lily, a symbol of that town. *L. flos*. Ital. *fiore*. From *Flora*, goddess of flowers.

Shilling (E.). A.S. *scilling*. The base is *SKIL*, to divide (as "shelf.") The suffix *-ing* is a double diminutive. Hence, for the name uncertain, but judging from the Latin and Greek words, means "divided" or "small moneys."

Penny (L. with E. suffix). M.E. *peni*, pl. *penies*, contracted form *pens*, whence "pence," Modern E. A.S. *pening*, after form *penig*, whence M.E. *peni*. The oldest form is *penning*, from a base borrowed, through Old High G. from *L. pennis*, a pledge. The literal sense is "a little pledge"—i.e., a token, a coin.

Farthing (E.), literally a fourthing of a penny. M.E. *ferthing*. Older A.S. *feorth-a*, with double diminutive *-ing* = feorthling.

4. Weights.—Weight (E.). M.E. *weght*, *wight*. A.S. *wiht*, *gewiht*. "Weight" is from M.E. *weghan*; A.S. *wegan*, pt. t. of *wag*, to weigh. Allied to *L. vehere*, Skt. *val*, to carry. A.R. *WAGH*.

Avoir-du-pois is F. The third word is O.F. from *peiser*, *poiser*, later *peser*, to weigh; not from *pondus*, *L*.

Troy-weight. So called from a weight used at the fairs at Troyes, a town S.E. of Paris.

Ounce. (F.—L.). O.F. *unce*, *L. uncia*. Originally, a small weight. Compare Gk. *onkos*, weight, bulk. "Incū" is also derived from the same. M.E. *inche*, A.S. *ynce*.

Drachm. Dram. (F.—L.—G.). O.F. *drame*, *drachme*. *L. drachma*. Gk. *drachme*, a handful, a drachma, used as a weight and a coin. Compare with *dragma*, as much as one can grasp, from *drassomai*, I grasp.

Scruple (F.—L.). F. *scrupule*, a little sharp stone ("in a man's shoe," Cotgrave), hence a hindrance, a perplexity, doubt; also a small weight. *L. scrupulum*, acc. of *scrupulus*, diminutive of *scrapus*, a sharp stone. From A.R. *SKRU*, allied to *SKAR*, to cut.

Grain. (F.—L.). M.E. *grein*. O.F. *grain*. *L. granum*, a grain, corn. Cognate with E. *corn*. A.R. *GAR*.

5. Measures.—Measure (F.L.). M.E. *mesure*; O.F. *mesure*; *L. mensura*, from *mensus*, p.p. of *metiri*, to measure. A.R. *MA*.

Gallon (F.). Origin unknown. M.E. *galon*, *galun*; O.F. *gallon*, *jalon*, a large bowl, a gallon; augmentative form of the word which appears as modern F. *jall*, a bowl.

Quart (F.—L.). A fourth part. Apparently short for *quarter-tus*. *L. quatuor*, four; Skt. *chatvar*; Aryan type, *kvatwar*.

Pint (F.—Span.—L.). A spot, mark, painting; named from a marked part of a larger vessel. *L. picta*, feminine of *pictus*, p.p. of *pingere*, to paint; F. *pinle*; Span. *pinta*, a spot, a pint.

Minim (F.—L.). From the superlative O.F. *minime*, literally "very small." The positive form occurs in A.S. *min*, small. A.R. *MI*.

Graduated is from *L. gradi*, to step, walk, go. "Graduated" is, therefore, "by steps." A.R. *GARDH*.

6. Dispensing.—Dispense (L.—F.). *Dis*, apart, and *pendere*, to weigh; O.F. *dispenser*, to dispense with. The *L. dispensare*, to weigh out, is the frequentative form of *dispendere*.

Prescription (L.). Something written before. *Pre*, before; and *scribere*, to write, to scratch, or cut slightly. A.R. *SKARBH*.

Water (E.). A.S. *water*; Dutch, *water*; G. *wasser*. Allied to Icel. *vatu*; Dan. *vand*; Swed. *vatten*; Goth. *vato*; Russ. *roda*; Gk. *hudor*; *L. unda*; Lith. *vandui*; Skt. *udun*; all from A.R. *WAD*, to wet.

Medicine (F.—L.). O.F. *medecine*; *L. medicina*; from *mederi*, to heal. Base *MADH*, to learn, to heal; from A.R. *MA*, to think.

Collyrium (Gk.). Originally a medicine for sore eyes, made up in small round cakes, like the buttons for fastening the wires of a lyre. Now used for the made-up lotion.

Confection (L.). Something made up. *Con*, with; and *ficere*, to put together; p.p. *confectus*.

Draught (E.). From same word as "drawer," above.

Electuary (F.—L.). M.E. *lectuarie*; O.F. *lectuaire*, *electuaire*. *L. electuarium*, a medicine which dissolves in the mouth. Perhaps from *clinetarium*, from *clingere*, to lie away; or from Gk. *ekleichein*, the same. "Linctus," from *L. lingere*, to suck away.

Elixir (Arabic) = *el ilsir*, the philosopher's stone. It has

been used to signify the liquor by which alchemists hope to transmute base metals, the quintessence of a drug, and a medicine made by strong infusion, thicker than a tincture. Imbroglio (F.—L.). *L. Gk.*—O.F. *embrogation*, from *imbrogare*, to imbrog, to foment. Gk. *embrechein*, to soak in. A sixteenth-century manuscript, noticed some short time ago in these pages, gave this name to an allusion.

Infusion (F.—L.). F. *infuser*, from *L. infundere*, to pour. *Infundere* is the root of many other words constantly used in pharmacy, as "diffuse," to spread abroad; "refuse" (sub.), what is poured back.

Injection (L.). *In-icere* = *icere*, to throw. "Jet" (of water) is from the same. *Inclare*, to fling, frequent. of *icere*, to throw. Allied to Gk. *iaptein*, to throw.

Liniment (F.—L.), salve, ointment. From *L. uncre*, to smear. Compare Skt. *li*, to melt; *ri*, to ooze. A.R. *RI*.

Lotion (L.), a washing; from *lavare*, to wash. ("Lavender" is also derived from this word. It is the herb used for freshly-washed linen. The final letter is an E. addition to the F. *lavande*.)

Mixture (L.). From p.p. of *miscere*, to mix. This word "mix" is an E. form of *misk*, A.S. *miscan*, not borrowed from the *L*, but allied to it. Compare Skt. *miṣra*, mixed. Base *MIKSH*, from A.R. *MIK*, as in Gk. *migrami*.

Menstruum (L.), a solvent. A word in alchemy, from some fancied connection with the phases of the moon; *mensis*, a month; *menstruum* being *Low L*.

Ointment (F.—L.). *L. ungere*, to anoint; Skt. *anj*, to smear; A.R. *AG*, *ANG*. In "ointment" the former *t* is due to confusion with *anoint*. The M.E. form is *oinement*; O.F. *oignement*.

Physic (F.—L.—Gk.). Originally the healing art: hence, medicine. O.F. *phisique*, science of medicine; *L. physica*, natural science; Gk. *phusike*, natural; from *phu-cin*, to produce. Skt. *bhu*, to be; *L. fore*; E. *bc*. A.R. *BHU*.

Pill (F.—L.), a little ball, short for *pilule*. *L. pilula*, a little ball, a globule, diminutive of *pila*, a ball.

Potion (F.—L.). From *potare*, to drink. Skt. *pa*, to drink (Irish *pot-aim*, I drink). A.R. *PA*.

Powder (F.—L.). M.E. *poudre*; F. *poudre*; O.F. *poldre*, *puldre*. Formed with excrement *d* from *pulverem*; acc. of *pulvis*, dust. Probably allied to *pulsus*, p.p. of *pellere*, to drive about.

Pessary (F.—L.). F. *pessaire*; *L. pessus* (*pressarium*?).

Salt (E.). M.E. *salt*. A.S. *sealt*. *L. sal*. Gk. *als*. Skt. *sara*, which also means the coagulum of curds or milk, from *sri*, to go, to flow. A.R. *SAR*. "Salt" was originally an adj., answering to *L. salsus*, salted: *salt water* = salted water.

Solution (F.—L.). F. *solution*, from *L. solutus*, p.p. of *soluere*, to loose, solve. From *so* (for *se*) apart, and *luere*, to loosen; allied to Gk. *lucein*, to set free; and to E. *lose*.

Suppository (L.). Formed from *sup* (sub.), near, and *ponere*, to place.

Syrup (F.—Span.—Arab.). F. *syrop*; Span. *xarope*; Arabic *sharab*, *shurab*. Arab root, *shariba*, he drank (whence "sherbet"), wine, beverage, syrup.

Tincture (L.). *Tinctus*, p.p. of *tingere*, to dye. Gk. *tengen*, to wet, to dye.

The following adjectives are thus derived—

Cool (E.). A.S. *cól*, cool. From the strong verb appearing in Iceland, *kala*, to freeze; pt. t. *kól*.

Cold (E.). M.E. *cold*, *kald*, adj. A.S. *ceald*, adj. Compare *gelidus*.

Lukewarm (E.). M.E. *luke*, *leuk*. Lukewarm is redundant = warm-warm; an extension of M.E. *len*, tepid. Allied to A.S. *hleov*, *hleov*, a shelter, Modern E. *lee*.

Tepid (L.). *Tepidus*, warm: from *teperc*. Skt. *tap*, to be warm. A.R. *TAP*.

Hot (E.). M.E. *hoot*. A.S. *hát*. A.S. verb, *hatan*, to heat.

Boiling (F.—L.). O.F. *boillir*; *L. bullire*, to bubble up, boil.

7. Implements and Apparatus.—Implement (Low L.—L.). From *im* (in) and *plere*, to fill in, execute. Allied to Gk. *pleos*, full. A.R. *PAR*.

Apparatus (L.), gear; *L. apparatus*, preparation, from *ap* (ad) and *parare*, to get ready.

Book (E.). M.E. *book*; A.S. *bóc*, of which the original sense was beech-tree. Books were originally writings scratched on a beechen board. Allied to *L. fagus*, Gk. *phagos*. A.R. *BIAG*.



Bottle (F.—Low L.—Gk.). A hollow thing. M.E. *botel*; F. *bouteille*. Low L. *buticula* dimin. of *butica*; Greek *butis*, *boutis*. Perhaps allied to "butt" and "boot."

Box (L.). M.E. *box*; A.S. *box*; L. *boxum*, anything made of boxwood. From L. *boxus*, the box-tree.

Cork (Span.—L.). Spanish *corcho*; L. *corticem*, acc. of *cortex*, bark.

Flame (F.—L.). O.F. *flame*, *flamme*, also *flambe*. L. *flamma* (= *flagma*), from *flagrare*, to burn; allied to Gk. *phlegain*, to burn. A.R. BHARG.

Gallipot (Dutch). Corruption of O. Dutch *gleypot*, a glazed pot; allied to G. *glatt*, smooth, and to E. *glad* (shining face).

Pot (Celtic). M.E. *pot*; Irish *pota*; Gaelic *poit*; Welsh *pot*; Bret. *pod*; whence also F. and Du. *pot*, &c. A drinking-vessel. Compare L. *potare*, to drink.

Gas (Dutch). The Belgian chemist, Van Helmont (died A.D. 1644) invented two words, "gas" and "blas"; the latter did not come into use. *Gas* seems to have been suggested by Dutch *gheest*, spirit, volatile fluid (E. *ghost*).

Glass (E.). A.S. *gles*; G. *glas*. Original sense, "shining." A.R. GHAR.

Ink (F.—L.—Gk.). M.E. *enke*; O.F. *enque* (F. *encre*). L. *encaustum*, the purple ink used by the later Roman Emperors, neuter of *encaustus*, burnt in; Gk. *en*, in; *kaio*, I burn.

Jar (F.—Persian). O.F. *jare*, "a jarre" (Cotgrave); Persian, *jarrah*. Compare Persian *jarrah*, a little cruse, a jar.

Jug (Hebrew). Drinking vessels were formerly called Jacks, Jills, and Jugs, all of which represent Christian names. "Jug" and "Judge" were usual as pet female names; and Skeat supposes they stand for Judith.

Knife (E.). M.E. *knif*, pl. *knives* (with *u = v*). A.S. *cniif*, literally "an instrument for nipping or cutting off." Base KNIB or KNIP, whence also E. *nip*.

Mortar, Morter (L.). M.E. *morter*; A.S. *mortere*. L. *mortarium*. Compare L. *martulus*, a hammer. A.R. MAR, to pound.

Pan (L.). M.E., *paune*; A.S. *panne*. Low L. *panna*. Corrupted from L. *patina*, a shallow bowl, pan, basin.

Pen (F.—L.). O.F. *penn*; L. *penna*, a feather; O.L. *pesna*. From A.R. PAT, to fly.

Slab (Scand.), a thin slip of timber or stone; or, sawn timber. M.E. *slab*. Put for *slap*, allied to prov. E. *slape*, slippery. "Sleeper," timber for rails, is explained thus.

Spatula (L.—Gk.). L. *spatula*, diminutive of *spatha* (Gk. *spathe*), a broad blade.

Board (E.). M.E. *bord*; A.S. *bord*, board, side of a ship, a plank. Hence the modern use for a piece of wood, &c.

Card (F.—Gk.). Corruption of F. *carte*; Low L. *carta*; L. *charta* (Gk. *charte*), a leaf of paper.

Chip (E.). Diminutive form of "chap" or "chop" = to cut a little at a time. "Chap" and "chop" (M.E. *chappen*, *choppen*, not found in A.S.), from A.R. SKAR.

String (E.). A.S. *streng*, cord; from its being tightly twisted. Compare Gk. *straggale*, a halter, from *straggos*, tightly twisted.

Paper (L.—Gk.—Egyptian?). M.E. *paper*, directly from L. *papyrus*; Gk. *papuros*, a rush or flag. Probably of Egyptian origin.

Wood (E.). M.E. *wode*; A.S. *wudu*, original form being *widu*. Perhaps allied to "withy" (from WI, to twine).

Distill (F.—L.). O.F. *distiller*; L. *distillare*, *destillare*, to drop down. From *de*, down, and *stillare*, to drop, from *stilla*, a drop. "Still," the apparatus, is short for M.E. *stillatorie*.

Evaporate (L.). From p.p. of *evaporare*; *e*, out of, and *vaper*, vapour. A.R. KWAP.

Macerate (L.), to soften by steeping. From p.p. of *maccare*, frequentative of a base, *mac*. Gk. *massein*, to knead; Skt. *mach*, to pound; A.R. MAK.

Empty (E.), void. M.E. *empti*; A.S. *æmtig*, literally "full of leisurc." From A.S. *æmta*, *æmetta*, leisure.

Full (E.), complete. A.S. *ful*. Skt. *purra*; Gk. *pleres*; L. *plenus*; A.R. PAR. "Fill" (A.S. *fyllan*) is formed from *ful* by vowel-change.

This list of words in constant use in our business may be extended almost indefinitely. For a complete list of cognate, related, and illustrative words in other languages, reference must be made to Skeat's dictionaries and other works. I have not attempted to classify words derived from the various main sources; but in reading through the above, one obtains a good idea of the approximate dates of the introduction of ideas and uses into our profession.

## THE TEETH IN RELATION TO HEALTH.

MR. W. RUSHTON, L.D.S., gave the Chemists' Assistants' Association a lecture on this subject last week. In the course of it he said that the teeth in the human subject consist of thirty-two ivory-like masses, all differing in size and shape, and inserted in the bone of the upper and lower jaws in the form of elliptical arches, the upper arch being the larger. When the mouth is closed, the cusps of the teeth are interlocked, and every tooth antagonises more or less two teeth of the opposite jaw. The bulk of each tooth is composed of a dense, ivory-like substance called dentine, which is covered on the root of the tooth by a substance identical with hard bone, called cementum, and covered on the crown by enamel. Enamel is the hardest tissue of the human body, containing only from 3 to 1 per cent. of animal matter, being chiefly composed of carbonate and phosphate of calcium and magnesium, and calcium fluoride. It is sufficiently hard to strike a spark from steel, like a flint. It was primarily derived from the epithelium, or scarf-skin; thus it becomes a modified skin, whilst the dentine, of which the bulk of the tooth is composed, is derived from the mucous layer below the epithelium. Lime salts are slowly deposited, and the tooth-pulp or "nerve" is the last remains of what was once a pulpy mass of the shape of the future tooth.

The thirty-two permanent teeth are preceded by twenty temporary or deciduous teeth. These are fully erupted at about two years of age, and at about six years of age a wonderful process of absorption sets in by which the roots of the temporary teeth are removed to make room for the advancing permanent ones, and the crowns of the former, having no support, become loose and fall away. The phenomena of the eruption and succession of teeth are little understood. One would naturally suppose that the advancing permanent tooth was a powerful factor in the absorption of its temporary predecessor, but there were many facts to prove that it had no influence whatever. A child of six who has not lost any temporary teeth has in its jaws, either erupted or non-erupted, no fewer than 52 teeth more or less formed, and the compact manner in which they would remain in the jaw ready to come down to take their places in turn was as interesting as it was beautiful.

In carnivorous animals the teeth are of a cutting or incisive form, the lower closing inside the upper. In herbivorous animals they are broad and flat, like small grindstones. In man we have a combination of the two, which leads us to believe, in spite of the vegetarians, that man is intended to be an omnivorous animal.

There is no disease of the teeth so prevalent as dental caries. Although enamel is so seemingly indestructible, there is no tissue of the body which so easily falls a prey to disease. Sir John Tomes says: "Caries is an effect of external causes, in which 'vital' forces play no part. That it is due to the solvent action of acids which have been generated by fermentation going on in the mouth, organisms having no small share in the matter; and when once the disintegrating process is established at some congenitally defective point, the accumulations of food and secretions in the cavity will intensify the mischief by furnishing fresh supplies of acid."

Acid is therefore the great enemy of the teeth, and when the enamel is dissolved the bacilli and micrococci always present in the mouth appear upon the scene, and feed upon the gelatinous matrix of the dentine. Mr. Rushton proceeded to discuss the question, "How is it that dental caries is so prevalent?" On examining the skulls of our forefathers the dentist is struck with three interesting peculiarities: (1) the total absence of caries; (2) the great wearing away of the teeth; and (3) the large and finely developed jaw.

Bret Harte in one of his poems asks "Is civilisation a failure?" and Mr. Rushton admitted that as regards teeth it is. Our jaws are smaller than those of our ancestors, and our teeth, worn away by disease instead of use, are overcrowded and irregular. One reason of this is our artificial diet, and another may be traced to natural selection. Further, the jaws being composed of softer tissue than that of the teeth which they contain, changes take place more



quickly in them than in the teeth, therefore the jaws are getting smaller and teeth remaining more the same size, the consequence being overcrowding, which is a most active agent in producing caries. Added to these are our artificial mode of life, improper food containing too little teeth-forming material, and dyspepsia, in which we have sufficient explanation of the cause of tooth deterioration.

Two of the most common diseases of the present day are neuralgia and indigestion, and although specialists are inclined to think that every malady is closely connected with the disease of which they make a specialty, yet a very large proportion of the two diseases named arises from tooth trouble. Dr. MacNaughton Jones, in a very interesting and able paper on "Dental Reflexes," points out that neuralgia and lesions of the eye, ear, and other parts of the head and face are directly attributable to carious teeth, and that in many cases relief and cure followed only after extraction.

The British public show too much apathy about the care of their teeth. We must not look upon a tooth as an isolated member, but as a part of a beautiful and symmetrical organisation. When a troublesome grinder comes out not one in a thousand reflects that he has deprived himself of the use of its antagonists also. Frequently the teeth contiguous to the one extracted tilt over, and thus form a poor grinding surface. When a tooth has lost its antagonist the tendency is for it to elongate, loosen, and come out. Then when the back teeth are lost food is improperly masticated by nibbling with the front teeth, which are unequal to the strain, and indigestion is the inevitable result. The sufferer too often seeks to cure the disease without remedying the cause, and, of course, fails. All the pepsin and bismuth in the world will not make up the loss of masticating teeth.

The remedies for this state of things are:—(1) Strict personal attention to the teeth. They should be cleaned at night. (2) A conservative treatment, having them preserved when necessary by the process of stopping or filling, which when efficiently performed is one of the most successful operations in any branch of surgery; and (3) State control.

The amount of tooth disease amongst the poorer classes is truly astonishing. Mr. Rushton, as dental assistant at the Evelina Hospital, Southwark, has had every opportunity for observing this, and the condition of the mouths of the children of the poor he could only describe as "shocking." He strongly recommended that dentists should be attracted to all the services under Government, and that the State should provide trained dentists to look after the children in our board schools. In reference to our soldiers and sailors, after spending enormous sums in making them good fighting machines, we grudge them the attention to a disease which at the present day causes more direct and indirect suffering than any other in our country, and a man who could not feed well could not march well nor fight well.

## PARLIAMENTARY.

### THE PHARMACY BILL.

The second reading of this Bill was to have been taken on Wednesday, but on Tuesday it was deferred until Wednesday, May 4. Notice was given on the same day by Mr. James Hozier, member for the southern division of Lanarkshire, to move on the second reading of the Bill "that it be read a second time this day six months."

### THE SUPPLY OF DRUGS TO THE ARMY.

In the House of Commons on Tuesday, Mr. Arthur O'Connor asked the Secretary of State for War whether any steps had yet been taken, in accordance with his promise of last year, to secure for the public the advantages of open competition or limited competition for the supply of drugs, and medical comforts and appliances, and surgical instruments to the army.

Mr. St. John Brodrick: The supply of drugs and medical appliances has been put up to limited competition, and the contract has fallen to Messrs. Herring. No change has been

made in regard to surgical instruments, experience will show whether the public will gain by the change of system.

Mr. A. O'Connor: May I ask the hon. gentleman who decided on the list of contractors who should be invited to competition.

Mr. Brodrick: It was decided by the Secretary of State after Committee inquiry.

Mr. A. O'Connor: Why was the name of Messrs. Lescher & Evans, one of the largest firms in the trade, omitted?

Mr. Brodrick: I am unable to give a detailed answer off hand.

### ETHER-DRINKING IN IRELAND, AND THE AGEING OF SPIRITS.

Evidence on this subject was given on Tuesday before the Select Committee of the House of Commons on British and foreign spirits, Sir Lyon Playfair presiding.

Dr. Pavy said he had read the evidence on the subject, and had taken steps to ascertain from medical men in the districts where this practice was alleged to prevail whether the statements which had been made were true or not. He had addressed letters to forty-five medical men in these districts, and had received twenty replies so far. One said: "Ether is sold by grocers and druggists, and consumed on market-days—mostly by Roman Catholics who do not drink whisky. I knew a man who could drink half a pint without any apparent result." Another remarked: "Some years ago it was sold across the counter by chemists and druggists in drachm doses for 1d., chiefly to people from the mountains. It renders those addicted to drinking it liable to gastric ulcer." One had heard of one or two deaths resulting from the habit, severe gastric inflammation being set up very rapidly. "The people," this correspondent says, "like it because they can get drunk upon it quickly, and because they recover in a very short time." Others say that the habit is dying out, and that chemists who sold large quantities of ether a year or so ago now had scarcely any demand for it. One or two others referred also to the habit of methylated-spirit drinking as being indulged in almost as commonly as that of ether-tipping. The general result of the evidence contained in these letters was to the effect that the practice of ether-drinking certainly did exist in parts of the country, but that it did not prevail to such an alarming extent as some of the statements made by former witnesses had seemed to indicate.

The Chairman: You are aware, I expect, that ether has lately been scheduled as a poison under the provisions of the Food and Drugs Act (*sic*), and that its sale must consequently now be attended with considerably greater difficulties than formerly?—Yes; I am aware that that step has been taken, and consider that it is decidedly a right and proper course to take.

Dr. Lauder Brunton was then examined as to the ageing of spirits. He said that the evidence now available regarding the nature of the impurities of spirit, and the action of these substances on the human body, and the power of ageing to modify that action, was at present too small to render advisable at the present time any measure which would interfere with commerce to such an extent as compulsory bonding for a year would.

The Chairman: Do you know in what way a man drunk with ethylic alcohol would fall?—He might fall in any position, depending upon the nature of the road on which he was walking.

The Chairman: Is it not the experience of mankind, as recorded in the Bible and elsewhere, that old wine is better than new?—It is noted in the Acts of the Apostles that men were said to have had too much new wine, indicating that the new wine seemed to have a more exciting action than the old.

The Chairman: So that the experience of ages is that old and mellowed drinks are better than new ones?—Yes.

Inspector Clarke, of the Board of Inland Revenue, also gave evidence upon ether-drinking. He had recently spent three months in Ireland, making investigations, under instructions from the Inland Revenue authorities, in regard to the consumption of ether in the form of a beverage. His inquiries had been made at Cookstown, at Draperstown, and in the neighbourhood of other towns where the practice was



alleged to prevail. He had interviewed clergymen of all denominations, poor-law clerks, members of the Royal Irish Constabulary, grocers, chemists, and others likely to possess information on the matter. As the result of these inquiries he and his colleagues came to the conclusion that ether-drinking had decidedly increased in the districts named during the last two years, but that since ether had been scheduled as a poison, in the early part of the present year, the practice had largely diminished. All did not agree with this view of the question, however, the Rector of Cookstown, among others, holding that little effect had been produced by this step. The practice was not a new one in any way. Twenty or thirty years ago it was a common thing to see the ether-bottle, the whisky-bottle, and the brandy-bottle standing on the counter together. Most of the persons whom he had interviewed had seemed to think that the scheduling of ether as a poison would be effectual in diminishing its consumption as a beverage. As to the alleged consumption of methylated spirits in the same way, he had found no cases of the kind in the ether-drinking districts, though in other parts of the country—in what was known as the Braids district, for instance—he found that the practice was very prevalent. The register kept by the Inland Revenue officer at Ballymena for last year showed that no less than 714 gallons of this spirit had been received during last year by the local chemist. Of that quantity it would be impossible to say how much was used for what might be called legitimate purposes; but there were no manufactures in the town where it could be used, and the number of private houses in the town in which it would be likely to be used for lighting purposes was very limited. Small farmers and their servants and members of the artisan classes seemed to be those chiefly addicted to the practice. Methylated spirit was extremely nauseous, even when liberally diluted with water. It was preferred to whisky by those who took it mainly because it produced intoxication more rapidly, and also because the effects passed off more quickly. The Board of Inland Revenue was now considering what steps should be taken in order to secure that those who defrauded the revenue by selling methylated spirits for potable purposes should be punished, and to prevent, as far as possible, its use in this manner altogether. In the district where methylated spirit was consumed in this way ether-drinking was unknown.

The chairman announced that the Committee's report would be presented in a few days.

#### INFLAMMABLE LIQUIDS BILL.

The fate of this Bill was decided in the House of Commons on Tuesday. When the order for its second reading was reached the Home Secretary withdrew the measure unconditionally. Simultaneously a blue-book on the Bill has been published, in which are detailed the history of the existing Acts, and the effect which they have upon trade. The part of the "memorandum" which is of most interest at present is that which deals with the reasons for and data upon which the Bill withdrawn on Tuesday was based. It appears from this that since 1875 inquiries have been in progress, both at home and abroad, the object being to obtain such data as would furnish sound principles for legislation. Apart from these inquiries, representations by the trades concerned, a number of serious accidents, and an independent examination of the defects of the existing law have all had a determining influence. The inquiries were made by Colonel Majendie, Chief Inspector of Explosives, and Mr. Boverton Redwood, of the Petroleum Association, who made 192 visits of inspection to towns and cities at home, and 50 to 81 of the principal continental ports and cities. At home they visited various paraffin factories, such works as Price's Patent Candle Company (Limited); oilman's shops; varnish factories, such as Colthurst & Hardings; wholesale and retail druggists, amongst those being Myers & Saunders, Hull; J. Brooks, Shude Hill, Manchester; J. and J. Haslett and Dobbin & Co. (Limited), Belfast; McVaster, Hodgson & Co.; H. Moore & Co., and others in Dublin; W. and H. Goulding & Co., of Cork, &c. By 1884 a draft Bill was in preparation, and two years later Colonel Majendie and Mr. Redwood extended their inquiry to Canada and the United States. In the course of the inquiry in foreign parts it was found that the regulations

in various countries are far more rigorous than in the United Kingdom. Thus under the Bill now withdrawn 100 gallons was the maximum allowed to be stored in barrels in premises under registration, or 250 gallons in metal tank depôts. Belgium alone approaches at all near this, allowing 80 gallons in barrel, and in the United States only 1 barrel (= 40 gallons) is allowed in the chief cities. In no Continental country is a quantity exceeding 50 gallons allowed to be kept in barrel, and generally the regulations are stringent as to storage in metallic vessels. There was considerable difference of opinion as to storage quantity in the committee which was called into existence at the end of 1887 mainly on the representation of the Petroleum Association, and before which an abstract draft of the Bill by Mr. Albert Gray was submitted. A conference was subsequently held with representatives of a variety of the trades who use or produce naphtha or other mineral spirit. Some of their objections were met, but the fate of the Bill of this year shows that all opposition was not smothered. The whole history of petroleum legislation indicates that we shall yet hear more of the Bill; and, in view of its reappearance, those directly interested would do well to study "Colonel Majendie's Memorandum," which can be obtained from the Government publishers for a shilling.

#### Personalities.

MR. J. R. PHILPOTTS, chemist, Newnham-on-Severn, has been returned at the head of the poll for the Local Board of that district.

MR. INSULL, chemist and druggist, of Hanley, has been re-elected (for the eighth time) churchwarden of St. Luke's Church.

MR. MAJOR HILL, late managing assistant with Mr. Thomas Sellars, Coventry, has commenced business at 52 Norfolk Street East, Wisbech.

SIR DOUGLAS MACLAGAN, M.D., visitor to the Scotch Board of Examiners, is to receive the honorary degree LL.D. from the Glasgow University next week.

MR. J. T. SMITH, chemist and druggist, of Radcliffe, Lancashire, has been elected for the third time on the Local Board of that town. This time Mr. Smith was at the head of the poll.

MR. WILSON, chemist, Oxford, was on Easter Tuesday elected people's churchwarden (for the third successive year) of the parish of St. Thomas the Martyr, the oldest parish church in that city.

MR. ROBERT J. BLACKHAM, L.P.S.I., apothecary to the Rotunda Hospitals, Dublin, passed the Second Professional Examination of the Royal Colleges of Surgeons and Physicians held last week in Edinburgh.

MESSRS. VOGT & Co., of 27 and 28 Jewry Street, E.C., announce that Mr. G. Herbst, of Calcutta, has joined their firm, which will be carried on in future under the style of Vogt, Herbst & Co., London, and G. Herbst, Calcutta. Mr. A. Wiedemann will sign by procuration.

MR. ALF. P. BARNARD, chemist and dentist, Columbia Road, Hackney Road, and Bishop's Road, and at Stamford Hill, has been elected, for the tenth time, a Guardian for St. Matthews, Bethnal Green. During this long period he has either stood top of the poll or second for his ward.

MR. ANDREW PEARS, of the firm of A. & F. Pears, and Mr. R. C. Treatt, of Dunster House, E.C., left London on Wednesday morning upon a trip to the shores of the Mediterranean. After a short stay in Paris they will proceed to Grasse, thence to various places in Algeria and Tunis, and return by way of Malta, Sicily, and the Italian mainland. Mr. Pears makes the journey principally to recruit his health, while Mr. Treatt, who knows the south of Europe well, and possesses considerable linguistic accomplishments, will combine pleasure with business, and pay visits to the principal essential-oil centres on his route. The trip is expected to occupy about four weeks.



## Trade Notes.

CHEMISTS should note the offer of free samples of Caffyn's liquor carnis and preparations for themselves or medical men, made this week by the company.

A PRETTY transparency, produced at the London Sandblast Works, advertising Sainshury's lavender water, is offered by the maker, 176 and 177 Strand, to any chemist who will exhibit it.

IN one of Messrs. Armbrrecht, Nelson & Co.'s pages this week there is a new illustration of their premises, which is a set off to a brief conversation between two sweeps who figure in the scene, one of whom has tender recollections of Armbrrecht's "Happy Medium."

MR. MARTINDALE is offering dried moss compressed into sheets. This substance is now much used as an absorbent material in hospitals. It absorbs eight times its weight of water and is very light, so that it makes an excellent dressing, while there are other purposes to which it can be put in the sick-room.

MESSRS. JEWSEY & BROWN, of Manchester, have had their aerated beverages exhaustively analysed by Mr. Watson Smith, F.I.C., &c., late lecturer on Chemical Technology in Owens College, and his report, which is of the most satisfactory character, is now printed in a circular, for distribution by retailers along with a price-list.

CORK EXTRACTOR.—The latest useful invention, for which Messrs. Fordham & Sons (Limited) have taken the agency, is an instrument patented by Mr. T. A. McKee, B.A., of



Wesley College, Dublin, "for removing corks and portions of cork from the interior of bottles and other necked vessels." The instrument is in the form of a long corkscrew, but consists of a bundle of wires held together by a brass ring, but which, when inserted into a bottle, expand and grip the cork, and draw it out quite easily.

CLINICAL THERMOMETERS.—As showing how accurate clinical thermometers are made nowadays, we have before us a dozen Kew certificates for clinical maximum thermometers made by Messrs. Perkin, Son, & Rayment, and tested at the Observatory. Seven of them have the correction marked at  $0.0^\circ$  for all temperatures, two have three of the temperatures  $0.0^\circ$ , and one has  $95^\circ + 0.1^\circ$ , the other being  $+0.1^\circ$  at  $105^\circ$ ; the tenth thermometer requires a correction of  $+0.1^\circ$  at  $105^\circ$  and  $110^\circ$ , the eleventh a similar correction at three divisions, and the twelfth,  $+0.2^\circ$  at all divisions. It must be a great comfort to physicians to have instruments of this accuracy and with such a guarantee.

## SOME FACTS REGARDING DIABETES.

DR. A. E. WRIGHT recently delivered, in the theatre of the London University, a lecture on "Some Points connected with the Pathology and Treatment of Diabetes." Dr. Wright was formerly a Grocers' Research Scholar, and while he held the scholarship made a special study of diabetes. This malady is one which continues to receive great attention from physicians, yet it is apparently not on the decline. There is a correspondingly greater interest manifested by many persons unconnected with medicine, as many of our subscribers are doubtless aware, so that a few of the principal points of Dr. Wright's lecture will be of interest to chemists and druggists. One of the chief characteristics of diabetes is the loss of power to assimilate saccharides, and the consequent danger of poisoning by the

accumulation of these bodies in the system. This applies particularly to dextrose, as levulose is assimilated by diabetic patients. It is not always wise to rigidly exclude sugars from their diet—indeed, the ideal diet would be one of proteids and fats, to which the innocuous levo-rotatory carbohydrates had been added in such quantities as were available, or in default of these the "assimilable quantum" of dextro-rotatory carbohydrates, at least, whenever the bad results of a proteid diet were manifesting themselves. Of the assimilable carbohydrates inulin is the most important. Inulin is a homologue of starch, with the important difference that, instead of yielding dextro-rotatory simple sugars, as starch does, it yields only levo-rotatory simple sugars. It occurs abundantly in dahlia tubers, in dandelion, chicory, and other roots, and, as Kütz pointed out years ago, it can be baked into a good bread. Against it there is chiefly its price, some 15s. per lb.; but there is no reason why it should not be produced at a comparatively moderate price. When the fact becomes widely known that there would be a large demand for it if it were cheaper, the first step will have been taken towards its being produced for the market. At present an innocuous—that is, entirely assimilable—sugar for dietetic purposes remains as yet an unrealised desideratum.

We may, however, possibly have an approach to such a food-stuff in the Jerusalem artichoke, the carbohydrates of which, according to Tollens, are levulin and inulin during the spring and summer, while dextro-rotatory carbohydrates make their appearance in the tubers only in the autumn. Now, as artichokes are stated to come into season in June, it is possible that during a few months of the year Jerusalem artichokes may contain only assimilable carbohydrates. Various considerations also point to the fact that we may allow fruit, more freely than starch food, in the diabetic diet, as fruit contains a proportionately larger amount of assimilable matter.

As to the assimilation of milk-sugar experience has not yet shown that it is innocuous; hence, milk is often prescribed for diabetics. It is a great pity, considering its value, that this should be so merely because of the presence of the milk-sugar, and by putting together a few facts that have been long known about milk, Dr. Miller has been able to separate the proteid and fat of the milk from the sugar—in a word to precipitate the casein and fat of the milk, to filter them off, allowing all the sugar to run away from them, and then to redissolve the washed precipitate in a solution of the normal salts of milk, to which a little alkali had been added. The process is a very simple one. Take a quantity of milk, dilute it with three or four volumes of water, to which 1 to 2 parts per 1,000 of acetic acid have been added (ziss. to 3iij. of acid. acet. fort. of the B.P. to Oj. of water). This produces a precipitation of all the casein and fat of the milk. The precipitate is allowed to settle for a few minutes, and is then strained through a piece of calico. The precipitate is then washed, and redissolved in a 1-per-cent. solution of the following mixture of salts:—

	Parts.
Sodium chlorido .. .. .	11.5
Potassium chlorido .. .. .	9.9
Monopotassium phosphate .. .. .	13.8
Dipotassium phosphate .. .. .	10.0
Citrate of potassium .. .. .	5.9
Dimagnesium phosphate .. .. .	4.0
Magnesium citrate .. .. .	4.4
Dicalcium phosphate .. .. .	8.0
Tricalcium phosphate .. .. .	3.6
Calcium citrate .. .. .	25.5
Calcium oxide .. .. .	5.5
Sodium carbonate .. .. .	40.0

A trace of saccharin may be used to sweeten the milk. The salt solution is best used at about blood temperature, and the casein and fat precipitate is to be mixed up with it, as in making cocoa, to the desired thickness. We obtain by this easy method a very fairly palatable and entirely sugarless milk. The precipitated casein and fat can also be dried without undergoing alteration, and then used for the preparation of the milk.

The indications in the occurrence of which it may be desirable to allow sugar in diabetes are the appearance in large quantities in the urine of the morbid products of proteid metabolism. Among such products are acetone, acetic



acid and oxybutyric acid. Simultaneously with them there is a large increase in the amount of excreted nitrogen, as a long series of analyses shows. Where this happens we are bound to decrease the amount of nitrogenous diet, using instead more fat and carbohydrates.

The administration of alkalies in diabetes is undoubtedly incorrect, but there are cases occasionally in which they do good. In a case cited by the lecturer, where the patient was simply treated by a certain restriction of diet, and by the administration of citrate of potash, there was a large amount of pre-formed ammonia in the urine. The amount in the twenty-four hours was more than six times as great as the normal average daily quantity, which ranges somewhere about 0.75 gramme. The urine was only slightly acid, this being no index to the real acidity, as there is also "latent acidity"—that is to say, the surplus of acid over fixed bases in the urine is, as the beautiful investigations of Hallervorden have shown, always neutralised in the human or carnivorous organism by ammonia before it is excreted. Thus, the amount of pre-formed ammonia comes to be the index of the latent acidity of the urine. In this patient's case the amount was 4.58 grains per diem, and under the treatment mentioned it decreased in a fortnight to normal. This case shows as well as anything could how important it is for the physician to make a precise chemical study of the condition of his patient, and to adapt his treatment thereto. Obviously in this the pharmacist can be of great assistance to him, hence the importance of practice in urine-analysis, which we have so frequently advised. In the course of his lecture Dr. Miller also referred to the discovery of the phenomena of phloridzin or, more correctly speaking, of phloretin diabetes, which is due to Professor von Mering, of Strasburg. He was investigating the effects of certain glucosides on the storage of glycogen in the liver, when, in the course of his experiments with the glucoside phloridzin, which is obtained from the bark of many of our common fruit-trees, he came upon the remarkable fact that the phloridzin had made his animals glycosuric. The glycosuria is not due to a mere splitting off of the sugar contained in the phloridzin, because it can be obtained equally well when phloretin—that is, the residue of the phloridzin, after the sugar has been split off—is administered. The glycosuria from phloridzin can be produced in dogs and cats and rabbits, and also in man. In connection with this fact, it is interesting to note that in some of our popular handbooks of materia medica phloridzin is described as "a good bitter aromatic tonic," and is directed to be prescribed in doses of from 5 to 15 grains. With this last dose, twice daily, Von Mering obtained as much as 6 lbs. of sugar in the course of a month from "a patient." With phloretin the diabetes occurs in dogs and cats, but Dr. Miller has failed to produce it in rabbits. In regard to the quantity of sugar excreted, he obtained as much as 42 grammes—that is, more than 1 oz. and a third—in a dog's urine for a single day. The animals get apparently perfectly well when the administration of the drug comes to an end, and even while the sugar excretion is taking place the animals cannot be distinguished from normal ones. The whole study of this "artificial" diabetes is of great interest, and those who wish to follow it up more closely should refer to the *British Medical Journal* of April 11, from which we take these notes.

#### MARRIAGES.

[Notices of Marriages and Deaths are inserted free if sent with proper authentication.]

**SERGEANT—CUMMINGS.**—On March 26, at St. James' Church, Bermondsey, William Thomas Sergeant, pharmaceutical chemist, Croydon, to Alice, youngest daughter of J. Cummings, Esq., of Bermondsey.

**WOOD—MALLET.**—On April 18, by the Rev. William Borchell, at Wing, John Wood, chemist, Aylesbury, to Elizabeth Ann Mallett, of Wing.

**LANOLINE.**—In an Italian official report the curious mistake is made that one of the tests for lanoline is that it should not lose more than 80 per cent. when heated to 100° C.; 20 per cent. is more like the thing.

#### DEEDS OF ARRANGEMENT.

The following deed of arrangement with creditors has been filed at the Bills of Sale Office, under the provisions of the Deeds of Arrangement Act, 1887. Some of these deeds are for the purpose of carrying out compositions with creditors (and such are specified below), but the great majority of them are "assignments" in the ordinary form, to a trustee or trustees, for the benefit of creditors. The Act referred to expressly provides that registration shall not give validity to any deed which is an act of bankruptcy, and there is no provision, in the Act, making any of these arrangements binding upon dissenting creditors.

**Hart, H. B. & E. L.,** 9 Mining Lane, E.C., colonial brokers and commission merchants (partners, Henry Barnett Hart and Ernest Lacon Hart, both of "Woodburn, Fairholt Road, Stamford Hill, trading as). Date, April 4; filed, April 11. Unsecured liabilities, 11,249*l.* 15*s.* 11*d.* Composition of 5*s.* 1*d.* in the *£*, payable—4*s.* with seven days of registration hereof, and 1*s.* 1*d.* on or before May 1. The following are scheduled as creditors:—

	£	s.	d.
Anderson, Weber & Smith, London	..	..	32 13 10
Brown & Emslie	..	..	27 17 0
Bachler, H.	..	..	108 13 0
Figuls, S. & Co.	..	..	900 0 0
Gray, E. D. & Co.	..	..	249 0 0
Gray, Nephew & Co.	..	..	3,663 0 0
Johnson, Rolls & Co.	..	..	590 0 0
Marshall & French	..	..	2,613 0 0
May, Malcolm & Co.	..	..	350 0 0
Petrocchino Bros.	..	..	71 12 1
Pitt, Squire J.	..	..	1,700 0 0
Ralli Bros.	..	..	591 0 0
Seton, Laing & Co.	..	..	250 0 0
Thew & Stiebel, Manchester	..	..	103 0 0
Valc, King & Co., London	..	..	

#### NEW COMPANIES.

**JOHNSON, MATTHEY & Co. (LIMITED).**—Capital, 900,000*l.*, in 15*l.* shares. Object's: to acquire and carry on as a going concern the business now carried on under the style of Johnson, Matthey & Co., and to carry on the business of assayers, refiners and metallurgical chemists, and dealers in gold, platinum, silver, and chemicals, &c. The first subscribers (who take an ordinary share each) are:—George Matthey, Hatton Garden; G. S. Sellon, Edward Matthey, R. S. Matthey, J. S. Pybus-Sellon, C. G. R. Matthey, P. St. Clair Matthey, R. S. Sellon, all of Hatton Garden. The above-named gentlemen, with the exception of the last-named, also act as directors. Qualification, 15,000*l.*; Registered office, 78 Hatton Garden, London.

**LONDON PHOSPHATE SYNDICATE (LIMITED),** with a capital of 60,000*l.*, in 100*l.* shares, to work guano-phosphates, &c., from the Island of Redonda, and to carry on the trades of chemical manufacturers, chemical refiners, &c. The first subscribers (who take one share each) are:—W. T. Deeley, Chester, manufacturer; John Abbott, Leicester Gate, chemical manufacturer; J. Forbes, Fenchurch Street, chemical manufacturer; F. Lennard, Fenchurch Street, chemical manufacturer; F. Ince, Fenchurch Street, solicitor; G. C. Parnaby, Lewisham, cashier; F. A. Deeley, Leadenhall Street, agent for the Dee Oil Company (Limited). The first directors are Messrs. W. C. Deeley, J. Thompson, W. S. Barrett, J. Forbes, J. Abbott, and F. Lennard. Registered office, 165 Fenchurch Street, London.

**THE PALATINE COLOUR COMPANY (LIMITED),** with a capital of 10,000*l.*, in 10*l.* shares, to acquire licences to work and use the inventions of C. A. Burghardt, Manchester, analytical chemist, for improvements in the production of nitrate of ammonia, and carry into effect an agreement, dated April 7, 1891, between C. A. Burghardt of the one part, and R. Marriott of the other part. The first subscribers, who take one share each, are:—T. J. Hutchinson, Bury, analytical, &c, chemist; S. Pearn, West Gorton, engineer; F. Pender, Manchester, corn-miller; W. Davison, Manchester, colour manufacturer; G. Milne, 4 Chapel Walks, Manchester, chartered accountant; G. Forsyth, Salford, corn-miller; G. B. Norton, Corporation Street, Manchester, merchant. The first directors are Messrs. T. J. Hutchinson, J. Newsome, and J. Leigh, qualified without holding shares. The future qualification is 100*l.* Remuneration to be voted at the general meeting.



## Practical Notes and Formulae.

### PERFUME FOR POMADE.

The perfume required for the last-mentioned formula is composed of the following:—

English essence of raspberry .. .. .	20 minims
Oil of cinnamon .. .. .	7 "
Oil of citronella .. .. .	8 "
Oil of rose-geranium .. .. .	5 "
Oil of bergamot .. .. .	6 "
Peruvian balsam .. .. .	5 "

Mix.

### GUM FOAM MIXTURE FOR SODA-WATER SYRUPS.

The following, according to Mr. E. V. Zoeller, of Tabora, Nor. Car., will keep indefinitely. Two to four fluid ounces to a gallon of syrup serves the purpose.

Place 1 lb. of gum acacia in a 4-pint wide-mouth bottle; rinse the gum two or three times by shaking with about 32 oz. of water each time and pouring away; then add 32 oz. of water.

Stir with a sufficiently long handled wooden paddle until dissolved, then add—

Benzoic acid .. .. .	40 grains
Dissolved in	
Rectified spirit .. .. .	2 fl. drachms
Mixed with	
Tincture of quillaia .. .. .	6 fl. oz.

Finally mix and strain.

### WHITE FINISH FOR SHOES.

Best white glue .. .. .	1 lb.
Sulphate of zinc .. .. .	1 1/2 "
Sulphate of copper .. .. .	2 "
Bolton pipeclay .. .. .	1 "
Sulphate of magnesla .. .. .	1 "
Light yellow ochre .. .. .	2 oz.
Water .. .. .	4 gal.

Mix and let stand until all is dissolved, then bring to the boiling point and add 2 lb. oxalic acid and tragacanth q.s. Iron or gum brush in the usual way, and wax. If this is properly used, the red colour will not work through.

So. American.

### MENTHOL SOLUTION FOR PAINS.

A CORRESPONDENT of the *Eclectic Medical Journal* recommends the following as a very effective remedy for toothache, frontal headache, and any violent pain due to irritation of nerve-centres, or branches of the same. In severe frontal pain of a catarrhal origin, the open bottle of this solution held close to the nostrils, so that the fumes can be inhaled, will rarely fail to give relief:—

Menthol crystals .. .. .	1 drachm
" cinnamon .. .. .	20 minims
Oil of cloves .. .. .	20 "
Rectified spirit .. .. .	4 drachms

Dissolve.

### HOW TO MAKE A GUTTA-PERCHA STOPPING.

DR. MERIT WELLS, an Indianapolis dentist, states that the first thing to do is to see that the cavity has been properly prepared, protected and dried. Then take a piece of gutta-percha a little larger than will be required to fill the cavity. Warm gradually and shape it into a pellet or bean shape, being careful not to burn the gum. Use dry heat (on a heated slab or by passing rapidly back and forward through the flame of a lamp). When the gutta-percha is pliable, take a smooth spatula or blunt instrument and press the mass into the cavity till it is full. If the gutta-percha seems to be unyielding before the cavity is full, heat the instrument slightly and apply till the gutta-percha becomes pliable. When the cavity is full allow the filling to cool, then heat the instrument and press near the centre of the filling. Press the instrument away from the centre down to the surface of the opening and off, carrying away the surplus. Then allow the gutta-percha to cool, and again heat the instrument and press in the opposite side of the cavity similarly. Cool again, and thus treat the whole surface of the filling. Avoid pressing backward and

forward, as thus you got the filling to playing or rocking in the cavity. In case the nerve is exposed or nearly so, shape enough material to fill the whole cavity in such a way that a rounded, smooth point may be brought in contact with the exposed nerve or sensitive point. The cavity being all ready (dry, &c.), heat the point of gutta-percha which is intended to touch the nerve or sensitive point till it is pliable, then press the surface against a smooth instrument, making the gutta-percha smooth and cool at the same time. Press the gutta-percha to place quickly and gently till the bottom is reached, leaving no space; rest till the material has cooled, then proceed to fill as described before, being careful to keep the gutta-percha as cool as possible to work, as the heat is liable to cause pain and inflammation in the pulp. When the patient winces at the first touch of the gutta-percha at the bottom of the cavity, you may know you have touched the nerve, and no more pressure should then be applied until the mass cools.

### ARTIFICIAL SEA-WATER.

For aquaria there is nothing better than this (except the natural thing):—

Chloride of sodium .. .. .	31 grammes
Sulphate of magnesia .. .. .	7 "
Chloride of magnesium .. .. .	10 "
Chloride of potassium .. .. .	2 "
Water .. .. .	3 to 4 litres

### GLYCERINE JELLIES FOR THE HANDS.

(1)

Tragacanth .. .. .	60 gr.
Glycerine .. .. .	2 oz.
Water .. .. .	4 "
Extract of rose .. .. .	6 drops

(2)

Gelatine .. .. .	2 dr.
Glucose .. .. .	1 oz.
Glycerine .. .. .	6 "
Water .. .. .	3 "
Oil of rose .. .. .	5 drops

### CLARIFYING LIQUIDS.

WRITING on the various means for clarifying the liquids most handled by pharmacists, the *Pacific Drug Review* states that one of the best clarifying agents is albumen, which, on heating in the liquid, is formed into flakes that carry down any solid matter which may be in the liquid. Vegetable extracts frequently contain, especially if they are extracted cold, enough albumen to effect clarification when gently heated. Egg-albumen dissolved in a small quantity of cold water may be used in the proportion of 1 oz. to 2 gallons of liquid extract. The two are mixed together and heated until coagulation occurs, then it is filtered. The process is facilitated, and the effect of the albumen increased, by adding a small quantity of pure kaolin liquor. Pulp made of filter-paper may be used instead of the kaolin, and for clarifying syrups there is scarcely any other substance that acts as well. Some extracts which are made from skins, &c., of fruits are liable to contain traces of albumen, pectin, &c. These can be removed by adding a small quantity of alcohol, just enough to precipitate these matters and no more. A small quantity of tannin added to extracts prepared from juicy fruits, and which contain albumen, gelatine, gum, or pectin, will precipitate these, especially if the extracts be gently heated before adding the alcohol. The addition of a little washed barytes or China clay will much facilitate the clarifying process by carrying down floating particles. For clarifying alcoholic liquors the following mixture will be found satisfactory:—

	Parts
Albumen, dry .. .. .	4
Milk sugar, dry .. .. .	4
Starch .. .. .	2

These are mixed and ground to a fine powder. Seventy-five grains of this are sufficient to clear a quart of liquid. It is added, and the mixture thoroughly shaken together, and then allowed to stand for a day or two, when the mixture will be found to have settled to the bottom, carrying with it all floating matter.



## Trade Report.

*Notice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.*

*It should also be recollected that for many articles the range of quality is very wide.*

42 CANNON STREET, April 16.

THE drug and chemical trades have been rather quiet this week, and prices generally rule in buyers' favour. At to-day's drug auctions, which were exceedingly lengthy, a decline was established in the following articles:—Ipecacuanha, vanilla, Cape aloes, Chinese cantharides, honey, and Sumatra gum benzoin. Cod-liver oil is also lower, and the market for rhubarb is decidedly weak. Buchu, gamboge, dragon's-blood, and ergot of rye are very steady. Raw camphor is firmly held on the spot, but rather easier for delivery. Arca nuts, cardamoms, green strophanthus, nux vomica, and beeswax have advanced in price. In chemicals, cream of tartar and soda salts are lower, and quinine has again broken the record of decline. Refined camphor is very firm; citric acid and hypophosphites are dearer. The following are the principal changes in outside articles:—Higher: sticklac and Kurpah indigo; steady: tea, soy, and cutch; lower: gambier, indiarubber, Bengal indigo, shellac, pimento, and Jamaica ginger.

A NEW MUSK SUBSTITUTE.—Another claimant for favour as a cheap substitute for musk made its appearance in trade some weeks ago. It is manufactured in Germany, and appears in the form of a white crystalline powder in needle-shaped crystals, a few millimetres in length. It is called Tonquinol. It is said to be suited both for soap and perfume manufacture, to remain impervious to the influence of light for a prolonged period, and to be easily soluble. An alcoholic solution of 1 in 50 may be diluted with water to any extent, and herein it differs from Musc Baur. Tonquinol is said to be soluble in most of the usual solvents, including fats, oils, ether, and chloroform. Its odour is not affected by boiling caustic potash. The price is about 25 percent. lower than that of Musc Baur.

GERMAN COLONIAL PRODUCE.—German explorers and publications of the "forward" school are fond of booming the German possessions in Africa, and hankering after the time, which they believe to be in the near future, when the German colonies shall be able to supply the home market with tropical produce independently from other countries. Most people with any knowledge of colonial affairs have always been sceptical about the progress of the German colonies, and a letter from Mr. H. F. Kothe, formerly administrator of the German "Ost-Afrikanische Plantagen Gesellschaft," will go far, if unchallenged, to intensify distrust. Mr. Kothe states that in 1887 he was sent to German East Africa to report upon the suitability of the country for tobacco cultivation. His report was decidedly unfavourable, and he urged the directors to withdraw from East Africa and go to Borneo instead. But he was told that this was impossible, as Dr. Peters and others had prophesied a splendid future for the country, and it would not do to reveal to the people at home that these prophecies were based upon ignorance of the true conditions of the country. With great difficulty Mr. Kothe finally succeeded in producing 300 lbs. of tobacco, which he forwarded to the German headquarters at Zanzibar, with the special declaration that the tobacco was of the most inferior quality. Although this tobacco was harvested by Mr. Kothe at Mbuzini, the company's shareholders were led to believe that it was grown upon the Lewa plantation, of which the brother of one of the directors was the administrator. The whole of it was shipped to Berlin, and the cigars made of it were much admired as being the produce of a "colony of the Fatherland." Mr. Kothe further accuses

the German East African Company of deliberately misleading the German people about the value of its possessions in Usagara, Usambura, Usegua, &c. As a proof of this, he states that Dr. Peters at one of his meetings stated that he had brought to Germany the first batch of 42 lbs. of vanilla grown in "our new German colonies." The father superior of a French mission on the east coast told Mr. Kothe that Dr. Peters had personally purchased this vanilla from him; while Mr. Kothe, who has visited most of the German stations in East Africa, declares that he has seen no vanilla anywhere.

THE FRENCH TARIFF ON CHEMICALS.—The Paris Chamber of Commerce has submitted to the French Legislature its report on the modifications which it considers desirable in the new customs tariff. So far as chemicals are concerned, the chamber is generally in favour of a reduction of the present duties. It is pointed out that whereas fifteen years ago France imported 12,000 tons of soda a year, while now her industry has grown so large that she actually exports over 20,000 tons annually. The chamber, therefore, suggests that the following duties will be sufficiently high: Caustic soda, 4f. per 100 kilos., or 10 per cent. *ad val.*; carbonate of soda, 2f. per 100 kilos., or 10 per cent. *ad val.*; chloride of lime, 30f. or 12 per cent. *ad val.* With respect to fine chemicals the chamber supports the continuation of the present tariff for all but the following: Bromine to be placed on the free list (present duty 1f. per kilo.); all bromides to be taxed 5 per cent. *ad val.*, or 25f. per 100 kilos. The tax on iodine, now 4f. per kilo., or about 20 per cent. *ad val.*, to be maintained in the interests of the kelp industry, but that on all iodides (now about 5 per cent. *ad val.*) to be raised to 4f. per kilo. or about 20 per cent., thus placing the manufactured product on a level with the raw. The late commercial war with Italy led to the placing of a heavy duty on concentrated lemon and bergamot juices, which the report wishes to abolish entirely. It would also free citrate of lime, and reduce the duty on crystallised citric acid from 50f. to 25f., or about 5 per cent. The report further asks that citrates may be made dutiable at 50f. per 100 kilos., instead of *ad valorem* as at present. The oxalic acid manufacture is so strong and well organised in France that it is considered safe to place it on the free list or at any rate to reduce the duty to 5 per cent.

THE PROPOSED FRENCH CUSTOMS TARIFF.—In the bill now before the French Legislature the average increase of the customs duties on imports is equal to 24 per cent. The steady decline of French trade since 1881, when the Protectionist régime began to prevail, is shown in the following table:—

Year.	Millions of Francs.		
	Total trade.	Imports.	Exports.
1860	4,147	—	—
1882	8,396	4,822	3,574
1884	7,576	7,744	3,233
1886	7,456	4,201	3,249
1888	7,373	4,107	3,247
1890	8,143	4,143	3,720

British imports into France have fallen from 28,104,000*l.* in 1881 to 21,532,000*l.* in 1890, while the French exports to the United Kingdom have risen during the same period from 35,912,000*l.* to 39,976,000*l.*

THE COMMERCIAL PROGRESS OF PERSIA.—During the last three or four years our produce markets have more than once afforded evidence of the increasing development of the economic resources of Persia, especially of the rich western and north-western provinces of that country. Since the conditional opening of the Karun river to European trade several varieties of produce have been consigned direct from the Persian Gulf to London, which formerly were either not met with at all or reached us by a roundabout way and in a more advanced condition of sophistication than we now



receive them. So far as the drug trade is concerned, instances of the growing importance of the Persian market are found in the consignments of unusually fine asafoetida, which have been received here from Hunder Abbas on the Persian Gulf and in the small shipment of pistachio kernels in shell to which we referred recently. Allowing for the slowness of commercial progress in Eastern countries, we may expect ere long to receive on our markets a much larger share of the gums, fruits, minerals, and other products in which the dominions of the Shah are known to abound than has hitherto reached us.

**THE DIRECT CONSIGNMENTS OF JAVA CINCHONA.**—The contracts existing between at least one firm of German quinine makers and certain Java planters for the direct supply of bark have been often alluded to as one of the causes of the depression in quinine. In connection with these contracts, it is of some interest that the output of the two estates, "Soekawana" and "Djajagiri," of which it is known that they consign their output in the manner described, is believed to be diminishing considerably. The Soekawana estate, which produced about 100 tons in 1889 and 1890, has sent no returns this year; while the "Djajagiri" plantation is estimated to produce only 30 tons this season. Both estates yield a bark of considerable average alkaloidal richness—viz., from 5½ to 6 per cent. The Djajagiri plantations occupy 167 bouws, the Soekawana, 400 bouws.

**DEVELOPING THE ZAMBESI REGION.**—The British South African Company have engaged a practical botanist, who has had over twenty years' experience in the cultivation of produce in Ceylon, to proceed to their territories in Zambesia and superintend the development of their vegetable resources. The gentleman in question, with whom we had an interview a few days ago, leaves early in May for Zanzibar, whence he will proceed by way of the Zambesi to his destination in the neighbourhood of the Sbiré Highlands. His attentions will be directed not only to the collection and export of such native products as are likely to find a market in Europe, such as rubber, gums and gum resins, oleaginous plants, and so forth, but he will also try the acclimatisation of tropical and sub-tropical products. Coffee is already cultivated with success in Zambesia; tea is going to be tried, but the company are alive to the danger of over-production in this article. Cocoa and tobacco are thought to hold out greater hopes of success. As regards drugs, needless to say, cinchona will not be tried. Opium-culture has been experimented in before in Mozambique, the result being a signal failure. Cardamoms and vanilla are among the first drugs to be tried, and the authorities have promised to lend every possible assistance in procuring plants and giving advice as to cultivation. Now that a trained botanist is about to proceed to the country of the strophanthus, we may expect the speedy elucidation of the mystery still surrounding the botanical classification of the drug. The first season or two, however, are likely to be taken up with preliminary investigations of the climatic conditions of the country, meteorological observations, &c. Native labour will be employed in the first instance, under the supervision of overseers from Zanzibar, Ceylon, and British India.

**THE NEW RUSSIAN CUSTOMS TARIFF.**—It is confidently stated in Continental commercial circles that a general advance of 20 per cent. in the duty on all the chief articles of import into Russia will be announced towards the end of April, and that the enhanced tariff will come into force on May 1, old style.

**THE FORTHCOMING GERMAN EXHIBITION.**—The German Exhibition will be opened at Earl's Court in May, and is hoped by its promoters to eclipse the American, the Italian, Spanish, and French exhibitions which preceded it. That in itself will not be a particularly difficult task. There will be a fine Art section comprising about 700 paintings, a display of hunting trophies, a colossal figure of Germania, a model of the Wartburg, the historic castle where Luther was confined, a model of the far-famed Heidelberg Tun, and a large variety of scenic representations of German cities and landscapes.

The principal buildings of Berlin, of Potsdam, of Nuremberg, and of Heidelberg will be depicted on a large scale, and an exquisite view will be presented of Munich. The chief attractions of the western and central gardens will be the Schleswig-Holstein farmhouse and the gallery of German emperors.

**ACID (CITRIC).**—A considerable improvement has occurred in our market during the last few days, and prices close at an advance of about ½d. per lb. upon our last report. It is doubtful whether anything less than 1s. 8d. per lb. would be accepted to-day, and 1s. 7½d. has been paid on the spot. For delivery 1s. 8d. per lb. is asked. Juice is quoted at 25l. f.o.b. now. From Sicily we hear that after a period of calmness a fresh advance has occurred in the article, and is expected to assume larger proportions when the anticipated demand for consumption sets in.

**ACID (TARTARIC).**—The market remains quiet at 1s. 2½d. to 1s. 3d. per lb., according to brand.

**ACONITE.**—Twenty bags Japanese root of fair quality were again shown at to-day's auctions, and are held at 25s. per cwt., but there were no bids.

**ALOES.**—There has been a very active demand for *Cape aloes* privately since our last report, and prices rose considerably, business having been done early this week at 24s. 6d. to 25s. per cwt. for good bright quality. At to-day's auctions, however, 80 cases recently imported were shown and of these 64 (partly reshipped for New York) sold with a reduction of about 2s. 6d. per cwt. upon the highest prices privately paid. Good hard bright fetched 22s. 6d. to 23s.; fair to good seconds, from 19s. 6d. to 22s.; and several lots of ordinary drossy very common and sticky aloes, from 14s. 6d. down to 6s. per cwt. Of *Curaçoa* aloes the imported supply of 195 cases met with good demand, 134 packages selling at rather better prices, good bright red liver, at 61s. to 68s.; brown ditto, at from 50s. down to 43s.; good fair to bright in gourds, from 35s. to 41s.; and ordinary drossy to very common, from 14s. down to 3s. per cwt. For 9 cases good hard orange *Socotrine* aloes an offer of 64s. was refused, while a parcel of Zanzibars in tins was fairly well competed for and realised 51s. for good hardish red, down to 40s. for darker quality.

**AMBERGRIS.**—Nothing of first-class quality was offered to-day. Three tins hold pieces, rather heavy and undeveloped, fair flavour, were bought in at 110s. per oz. We hear it said that for small lots of very fine quality 180s. per oz. has been paid.

**ANISE.**—No Japanese *Star-anise* was offered to-day. Of *Italian anise* 4 bags sold without reserve at 20s. per cwt. to day.

**ANNATTO.**—The demand for seed which recently showed itself seems to have subsided, 104 packages good bright *Ceylon* being bought in to-day at 2½d. per lb.

**ARARоба.**—Twenty-four cases of the parcel recently imported were again shown at auction and bought in at 2s. 3d.; there was no demand on the part of the trade, however.

**ARECA NUT.**—For 5 bags good quality the very high price of 30s. per cwt. was paid to-day. This drug is exceedingly scarce.

**BALSAM COPAIBA.**—Seven casks of the thick dark grey *West African* copaiba, to which we have alluded before, were bought in at to-day's auctions. The broker suggested 3s. per lb. as the price. Two casks very thick cloudy yellow *Maranham* copaiba were bought in at 2s. 6d. per lb. New York reports that an arrival of about 200 cases during the last week of March has to some extent relieved the pressing requirements of the market. Good *Maracaibo* balsam is quoted at 2s. 4d. per lb. c.i.f. terms. *Maranham* at 2s. 3½d. c.i.f.

**BALSAM PERU.**—All the parcels shown at auction to-day were imported *via* Hamburg, and for this grade of balsam, unworked, 5s. 3d. to 5s. 6d. per lb. is asked.

**BALSAM TOLU.**—For six cases good softish from *Savanilla* no bids were made to-day, and they were bought in at 1s. 5d. per lb. Under date of April 1 New York reports a quiet market, while the last arrivals have as yet found no



purchasers. The quotations are from 1s. 3½d. to 1s. 3¾d. per lb. c.i.f., according to quality.

**BUCHU.**—The demand is very well maintained, and prices keep up fully to the level of last week's private transactions. Fourteen bales good green round leaves sold with competition at 5½d. to 5¾d. per lb., one fine lot at 5¾d. per lb. For one bale good long leaves 8¾d. per lb. was paid.

**CALUMBA** remains dull of sale, 60 bags small to bold root rather greyish, being bought in at 25s.; another lot at 22s. per cwt., while for another parcel of about 50 packages, partly very small mixed, with some fair yellow colour, an offer of 10s. per cwt. was refused.

**CAMPHOR (CRUDE).**—The market has been rather less active this week. In March-April shipment there has been some little business (so it is reported) at 137s. 6d. per cwt., c.i.f.; but for April-May it would be possible to buy at 127s. 6d., c.i.f. On the spot the holders are firm at 170s. per cwt., which price checks business; and it is stated that for March shipment there are buyers at 150s. c.i.f. terms.

**CAMPHOR (REFINED).**—The English makers have not made any alteration in their quotations yet. German is exceedingly scarce on the spot, 1s. 10d. being the quotation in that position; but for May delivery there are plenty of sellers at 1s. 9½d. per lb. net, delivered London.

**CANNABIS INDICA.**—Fine quality is wanting in the market, which is well supplied with medium and ordinary parcels. For a parcel of 25 packages fair greyish tops, rather dusty, 4d. per lb. was refused (the price being 4½d. per lb.); but another consignment of forty robbins, nearly all dust, with some seedy greyish tops, sold at 2½d. to 3d. per lb.

**CANTHARIDES.**—Three casks *Russian* cantbarides which were declared for sale were not offered. Twenty cases *Chinese* flies, on the other hand, were offered without reserve, this affording a good indication to test the actual state of the market for this article, prices having been quite nominal for several weeks, with quotations ranging from 1s. 6d. to 3s. per lb. The 20 cases offered to-day sold at 1s. 1d. to 1s. 2d. per lb., and the article has thus fallen back almost to the level at which it stood before the recent "boom." Twenty cases were imported from Hongkong this week.

**CARDAMOMS.**—The supply offered at to-day's auctions was very small, consisting of barely 40 cases, less than one-half of which was sold, with fair competition, at an advance of about 1d. per lb. for the better grades. Ceylon-Malabar: Fair yellowish round heavy sold at 2s. 2d., small to medium brownish at 1s. 10d. to 1s. 11d., medium palish lean long at 1s. 6d., small brown round 1s. 3d., ditto badly clipped and partly split at 1s., ordinary shelly ditto 9d. per lb. Mysore: Medium to bold round yellow 2s. 2d. to 2s. 4d., small size 1s. 8d. to 1s. 9d., medium to bold brown and specky 1s. 4d. to 1s. 6d. per lb. Pale seed realised 1s. 7d., ordinary wild Ceylon pods 9d. per lb. The shipments of cardamoms from Ceylon from January 1 to March 16 have been as follows:—1891, 71,437 lbs.; 1890, 96,333 lbs.; 1889, 48,572 lbs.; 1888, 83,083 lbs.

**CASCARA SAGRADA.**—The New York market has fallen to 33s. 6d. per cwt. c.i.f. in consequence of the greater pressure to sell by holders on the Pacific coast. The Californian agent of a prominent New York drug house reports as follows, under date, March 16, 1891:—"If bark is selling in Europe at 26s. per cwt. as reported by some papers, it may as well lie in warehouse here, at present at least. In regard to gathering bark the coming season, I do not think that at present prices there will be any cut. First, those who have it on their land will charge at least 1d. per lb., except when they may be clearing the land, and even then they will exact a price. Next, it costs 1½d. per lb. to peel and cure it well. All convenient access has been cut, and it will cost to get it out and ship to the seaport at least ¾d. per lb. This makes it stand in 3d. per lb. f.o.b. here, without any profit to the dealer, &c. How is it possible that anyone can afford to sell at 26s. per cwt. in the European markets without losing money on it? Yakima Bay and Coas Bay County are well cut out; last season (1890) they cut less than one-half of the amount gathered during the prior season (1889). The same may be said of Humboldt County; last season's

cut was but small, and probably not over ten tons. There can be no more bark cut upon Government land, as has been done heretofore. A large proportion of the bark cut heretofore has been peeled out of season, that is, after the sap has soured. About the first of July the sap begins to sour and dry up, and the bark presents a mottled and slimy appearance. In San Francisco there are tons of such bark which is about as tasteless as a maple chip. One party shipped recently about twenty-five tons, and the receivers will wonder what is the matter with the bark. The proper season for peeling is May and June, but not later than the early part of July."

**CASCARILLA.**—In good supply; about 160 bales being offered, of which 50 sold at 31s. to 32s. per cwt. for good silvery quill, and from 25s. to 28s. for fair, rather dusty, brownish quill.

**CINCHONA.**—In South American barks there is nothing new to report. Of *Guayaquil* bark, which has been so freely pressed upon the market lately, 7 serons only were offered to-day—fair grey quill, for which 4d. was refused. Of 84 packages flat *Calisaya* bark 9 sold at 1s. 4d. to 1s. 5d. for good sound bright orange, and from 9d. down to 2d. per lb. for damaged. Ten cases good bold cultivated Bolivian *Calisaya* in quills were bought in at 11d. per lb. The following figures relate to the exports of cinchona from Ceylon during the period between January 1 and March 16:—1891, 1,203,257 lbs.; 1890, 1,589,776 lbs.; 1889, 1,936,512 lbs.; 1888, 1,733,002 lbs.

**CIVET.**—Eleven horns bought in at 6s. 6d. per oz.

**COCA LEAVES.**—Seven packages of Ceylon and Java leaves, both equally badly harvested, dark mould and dull, offered without reserve, no higher bid than ¼d. per lb. being obtained; this was refused, as it was stated to be insufficient to cover the charges. In New York holders of *Huanoco* leaves (of which an arrival of 5,000 lbs. took place towards the end of March) are very firm, and quote 1s. 6¾d. per lb. c.i.f. for fine dark green. Light green *Truxillo* (*Maranon*) leaves may be had at 11d. per lb. c.i.f.

**COLOCYNTH.**—Thirty-six packages fair grey Turkey apple were bought in at 1s. to 1s. 2d. per lb. to-day, and of another parcel of 25 cases, seedy and brown fragments, part sold at 6d. per lb.

**CONDURANGO.**—Twenty-nine bales damaged bark from Hamburg, pale and rather woody, were bought in to-day at 7d. per lb.

**COWHAGE.**—For 1 case, rather seedy and stony, 1½d. per oz. was offered, and this bid is to be submitted to the owner.

**CREAM OF TARTAR.**—Still falling slowly. 95s. being to-day's nearest quotation for good white French crystals.

**CUBEBS.**—The market is still very well supplied, and about 85 packages were offered at to-day's auctions. Holders would be prepared to make further concessions, but buyers are very chary of laying in stock. For a parcel of 15 bales small berries, slightly stalky, of black colour and mace odour, from Singapore, 9½ 12s. 6d. is offered, but the limit is 9½ 15s.; for another lot of bolder but more stalky berries, 9½ 15s. was refused. A parcel of very dusty, stalky, bold brown berries is held for 10½; and 2 bags imported *via* Amsterdam, genuine, but small and partly shrivelled dusty berries, rather stalky, sold at 11½ per cwt., which must be thought a very good price.

**CUMIN SEED.**—Seventeen bales rather dusty and dark Malta sold at 19s. to 20s. per cwt.

**CUSCUS.**—Forty bales of this grass, of fair quality, are limited at 20s. per cwt.

**CUTCH.**—Firmly held. Private, small sales are reported of Bull and Eagle brands at 30s. and A.C.L. at 28s. At the auction on Tuesday 115 boxes were mostly sold at 23s. 9d. to 28s. 3d. for C.S. flag in block, and from 9s. 6d. down to 4s. 3d. for common spurious cutch.

**CUTTLE FISH.**—Fifteen cases rather yellow small to medium, from Australia, realised 2d. to 2½d. per lb., and for 5 bales fair white, rather broken, from the Canary Isles, 2½d. was also paid.



**DRAGON'S-BLOOD.**—In rather small supply and firmly held. Eight cases fine fiery seedy lump were bought in at 11*l.* per cwt., an offer of 10*l.* 5*s.* being refused.

**ERGOT OF RYE.**—Good *Spanish* is reported to be selling privately at 1*s.* 2*d.* per lb.; that figure would have been accepted, had there been any bid, for 8 cases offered at auction to-day.

**GALLS.**—China galls are dull at 58*s.* to 59*s.* per cwt. nominally, and Japan galls are quoted at 59*s.* to 60*s.* per cwt. There is not much business doing. For good to fine blue Bussorah galls from 56*s.* to 59*s.* per cwt. is quoted. Prices for white and green galls are more or less nominal, owing to scarcity of supply.

**GAMBIER.**—The market is lower for delivery, with sales this week of April-June and May-June at 22*s.* 6*d.* and 22*s.* 7½*d.*, c.i.f. terms respectively.

**GAMBOGE.**—Twelve cases were offered for sale at to-day's auctions. Holders are firm, and very little business was done. Fine bright orange pipe, partly blocky, is held for 13*l.*; rather damp mixed and blocky at 12*l.* per cwt. Four cases sold at 11*l.* 15*s.* to 12*l.* for fair colour, partly ricey and lumpy pipe.

**GENTIAN ROOT.**—Two bales rather lean, chumpy and dry root sold to-day at 15*s.* per cwt.

**GLYCERINE.**—Some of the German manufacturers have reduced their prices recently. The *B & S* brand, for instance, is now quoted at 56*s.* per cwt. for double-distilled s.g. 1.260, by the makers. It is, nevertheless, stated that the consumption remains good. We believe that the continued lowering of the prices is, to some extent, accounted for by recent improvements in the process of manufacture.

**GUM AMMONIACUM.**—This gum has been so scarce for a long time, especially in finer qualities, that seven packages just imported from Bombay, and showing partly a very fine gum, excited a considerable amount of curiosity. For very fine pale clean gum, in loose drops, bidding began at 70*s.*, and advanced to 102*s.* 6*d.*; but that lot was bought in at 120*s.*, which is said to be the limit, while for a somewhat less clean parcel 110*s.* is asked; yellow drop, mixed with blocky siftings, is held for 80*s.*, but there was no bid for this lot, the limits being considered rather too high.

**GUM ARABIC.**—Business in East Indian gums is dull, and very few transactions of any importance have transpired although some Ghatti gum has changed hands, we hear, at full prices. For fine pale glassy Knrachee gum, 92*s.* 6*d.* per cwt. was refused to-day. A parcel of fine white but somewhat dusty Mogadore was bought in at 11*l.* per cwt. to-day, and it was stated that the price was being paid privately. Some small orange mixed siftings of a Gehzirah character from Suakin were bought in at 29*s.* per cwt. to-day, and ordinary, reddish glassy Cape gum, rather blocky, realised from 12*s.* to 16*s.* 6*d.* per cwt. The imports of gums of all varieties into Trieste in 1889 amounted to 1,491 tons, worth 335,459*l.*; the exports, to 1,316 tons, of the value of 338,510*l.*

**GUM ASAFOETIDA.**—Twenty-eight cases from Bombay, stony and ordinary, were bought in at from 40*s.* to 45*s.* per cwt. nominally.

**GUM BENZOIN.**—A fair assortment was offered to-day including several lots catalogued without reserve. Of 45 cases *Siam* two sold at 11*l.* 5*s.* to 11*l.* 10*s.* for small to bold almonds; good bright in block, old fashioned red almondy block was bought in at 16*l.*; another parcel of 43 cases was mostly disposed of at 12*l.* 15*s.* (one lot 12*l.* 5*s.* and one 12*l.* 17*s.* 6*d.*) for medium block good almonds, partly loose siftings, nice clean bright clean and blocky, which are rather scarce, realised 7*l.* 15*s.* to 8*s.*; ordinary dull hold woody block, 5*l.* 2*s.* 6*d.* to 5*l.* 7*s.* 6*d.*; and ordinary grey woody siftings in block sold cheaply at 77*s.* 6*d.* to 80*s.* per cwt. About 124 cases of *Palembang* gum were shown, and nearly all bought in; the quality of most of these lots was inferior. Of about 55 cases Sumatra the greater part was disposed of without reserve at a decline of from 5*s.* to 10*s.* per cwt.; seconds fine white almondy centres, rather false packed sides, good flavour, at 8*l.* 2*s.* 6*d.* to 8*l.* 10*s.*; good almondy centres, false packed sides and corners, at 6*l.* 7*s.* 6*d.* to 7*l.* 2*s.* 6*d.*; dull brown thirds, old fracture, some good bold

almonds at 90*s.*; and ordinary red false packed thirds at 70*s.* per cwt. Ten cases fair almondy glassy Penang with false packed corners sold at 70*s.* to 77*s.* 6*d.* per cwt.

**GUM GALBANUM.**—One case of sticky mass, resembling galbanum in appearance, but having a strong odour of asafoetida (imported *via* Holland), was bought in at 3*s.* per lb. A few weeks ago, when true galbanum was exceedingly scarce, much of this gum is said to have sold at 2*s.* 9*d.* to 3*s.* 3*d.* per lb. Another parcel from Liverpool, soft brown woody mass, was also bought in at 2*s.* 6*d.* per lb.

**GUM GUAIACUM.**—Rather firmly held. For 20 cases heavy slatey block an offer of 1*s.* 2*d.* per lb. was refused, as being 1*d.* below the limit. Some good bright almondy block realised from 1*s.* 5*d.* to 1*s.* 6*d.* per lb.

**GUM MASTIC.**—From Smyrna we hear, under date of April 4, that about 700 kilos, mastic in drop had been sold there at a price equivalent to 2*s.* per lb. f.o.b. The market was very firm.

**GUM MYRRH.**—In fair supply, though the demand is very slack. The price for fair Aden picked is 87*s.* 6*d.*, and for good sorts 72*s.* 6*d.* to 75*s.*

**GUM TRAGACANTH.**—Large auctions will be held to-morrow, at which some 1,500 packages are declared for sale. The demand privately remains good, fine qualities especially being somewhat scarce.

**HONEY.**—Decidedly cheaper to-day, and selling freely at reduced rates. Seventy-nine packages Jamaica, of new import, sold at 32*s.* to 33*s.* for brownish to pale candied; and 31*s.* to 35*s.* 6*d.* for dark to good liquid brown. Good liquid clean amber California, in tins, was bought in at 46*s.* per cwt.; and 48 cases Italian, fine white to yellow candied, were also bought in at 47*s.* to 50*s.* per cwt.

**HYPOPHOSPHITES.**—Lay manufacturers, who have been underselling each other for a considerable time, have now agreed to maintain the uniform quotation, and have raised their prices to 2*s.* 6*d.* to 2*s.* 9*d.* per lb. (according to quantity) for hypophosphites of lime, soda, and potash.

**INDIARUBBER.**—Fine Pará on the spot may be had now at 3*s.* 8*d.*; but for May there are sellers at 3*s.* 7½*d.* per lb., at which price business is reported.

**INDIGO.**—The April auctions, which were held this week, resulted in an average decline of 2*d.* to 3*d.* per lb. on Bengal; but Kurpahs were from 3*d.* to 4*d.*, and Bimlipatams from 2*d.* to 3*d.* per lb. dearer; while dry-leaf Madras fully maintained its price. Of 7,650 cases declared, about 3,100 sold at or after the sales. Reports from Calcutta, dated March 25, do not speak very cheerfully of the crop prospects, rains having fallen in all the producing districts, whereby re-sowing on an extended scale has become necessary. It is thought that there may be more rains in all districts but one.

**INSECT FLOWERS.**—Open Dalmatian flowers are slightly easier, at 68*s.* to 69*s.* per cwt. c.i.f. Trieste. Other grades keep steady at 75*s.* to 76*s.*, c.i.f., for half-closed, and 82*s.* to 83*s.* per cwt. for closed flowers. Trieste-ground powder, 11*l.* per lb., London terms. At the drug-sales 10 barrels grey powder from Venice were bought in at 1*s.* 6*d.* per lb.

**IODINE.**—Crude iodine remains unaltered at 9*d.* per oz. Iodides are also unchanged.

**IPECAOUANHA.**—Several arrivals, amounting altogether to 232 packages, having taken place, it was thought that prices would show a considerable decline at to-day's auctions, when 70 packages were offered. Holders, however, kept the article well in hand, and the value only gave way from 3*d.* to 4*d.* per lb. —26 serons selling at 7*s.* 9*d.* per lb. for rather lean to 8*s.* 3*d.* p-r lb. for good stout sound root; damaged at 7*s.* 8*d.* to 7*s.* 11*d.* per lb.

**JABORANDI.**—The new crop continues to arrive freely in New York, and lower rates are looked for. Present quotation, 9½*d.* per lb. c.i.f.

**JALAP.**—We hear that several parcels of jalap, recently brought to New York, were refused admission into the port by the Custom's officers, on the ground of the inferior quality of the tubers. These lots have been shipped to "other ports." The New York quotation for good jalap is



lower—viz. 1s. to 1s. 1½d. per lb., c.i.f., for sound dry quality; the inferior parcels in question being offered at 10½d. per lb., c.i.f. Five bales fine heavy *Vern Cruz* root shown to-day were held for 1s. 5d. per lb. From New York there was a quotation this week at 10d. per lb., c.i.f., but the quality of the root offered at that price is not stated.

KANALA is dull of sale, and for 1 case shown at auction, which has hitherto been held at 10d. per lb., fair quality, 9d. was to-day solicited without response.

KOLA.—Of about 35 packages, only 2 bags mouldy grey dried West Indian sold at the high price of 6d. per lb.

MUSK.—This article was in very poor supply to-day. Of *Tonquin* musk, first pile in pods, 10 tins small to medium old-fashioned, fairly-dry, well-trimmed pods were bought in without mention of price. For 3 caddies third pile, partly adulterated, small to hold good pods, well-trimmed thin brown skin and underskin, 35s. was refused, the lot being bought in at 55s. For 3 other caddies ordinary dull n-trimmed, with thick skin and underskin, 26s. per oz. would be accepted. An offer of 15s. per oz. was refused for 2 tins Russian, fair Cabardine pods. Several lots of grain-musk were shown and bought in, except 1 bottle of Assam, which realised 20s. per oz.

NUX VOMICA.—Fully 2s. dearer for fine quality. Of 135 packages about 60 sold: good hold bright at 14s. 9d., subject to approval; rather dark grey, 10s. 6d. to 11s.; and ordinary damaged at 5s. per cwt.

OIL (CASTOR).—At to-day's auctions 15 cases good pale Italian (from Genoa) were shown, and held for 4½d. per lb.; for 30 cases yellow Coconada 3½d., and for 9 cases yellow Madras 3½d. per lb. is asked. The Liverpool spot market is slow at 3½d. to 3¾d. for good Calcutta seconds, but for arrival prices are well maintained. Reports from Calcutta, dated 25th ultimo, are to the effect that the price of castor seed has risen in consequence of the reduction in the stock of seed. The demand of oil for shipment to Europe and Australia was good. The rise in freight, according to Calcutta reports dated March 25, has interfered with the shipments to Europe, while the demand continues good, and prices both for oil and seed ruled in favour of sellers, and quotations show no sign of weakness.

OIL (COD-LIVER).—The market has become quiet, and prices rule cheaper, low offers being wired daily from Hamburg. Good non-congealing new oil offers at 72s. 6d. per barrel, London terms.

OILS (ESSENTIAL).—The following statistical figures refer to the exports of citronella and lemongrass oils from Ceylon in the period between January 1 and March 16:—1891, 2,198,400 oz.; 1890, 1,856,000 oz.; 1889, 3,524,212 oz.; 1888, 1,282,616 oz. At auction to-day 25 cases *Citronella* were bought in at 1½d. per oz., which is said to be the selling price, 10½d. per lb. being the c.i.f. quotation for tins. *Lemongrass* oil is firm at 1¾d. per oz. Twenty-four bottles *Ylang-Ylang*, brand not named, sold at 2s. 7d. to 2s. 9d. per oz. without reserve. Ten cases green *Cajuput* were bought in at 3s. 9d., 2 cases Fisher's *Patchouly* at 1s. 3d., and 2 ditto *Nutmeg* at 9d. per oz. For 10 cases good crystallised *Star-anise* 6s. 6d. per lb. was named as the price, which shows a declining market. *Cassia* oil is worth 3s. 6d. to 3s. 8d. per lb. *Clove* oil is offering as low as 2s. 11d. to 3s. per lb. for good quality. Italian essential oils are very firm, and a fresh rise in *Lemon* is reported from Messina.

OPIUM.—The London market is exceedingly quiet, and there is no change to report in the quotations given by us last week. Private advices from Smyrna, dated April 4, tell us that the beneficial rains that have fallen since the last days of March have saved the crops, which were in great danger owing to the long-protracted drought, and it is now hoped that there will be an abundant harvest this year should the weather continue favourable throughout the present month; and, although one-third of the opium crop has been destroyed, the spring sowings which are now taking place may compensate for the damage caused by the frosts. It is as yet too early to give any correct estimate as to the extent of the coming crop, but, according to present appearance, the outturn will probably not be less than 7,000 to 8,000 cases, and if that figure is attained, prices must decline later on. When the rain set in, the Smyrna market immediately

declined 3d. to 4d. per lb., and about 200 cases of current manufacturing have been taken (mostly for the American markets) at the equivalent of 8s. per lb. f.o.b.; 25 cases soft Karahissar opium for Cuba, 8s. 6½d. to 8s. 8d., and 3 or 4 current Yrcil at 8s. 4d., and another 10 cases of selected talequale have been sold at 8s. 4d. The advance in the rate of exchange has facilitated the execution of orders at lower. The sales have relieved the immediate financial requirements of the opium-holders, and hence the market was again a trifle firmer at the date of our report.

ORANGE-PEEL.—Rather more doing at low prices—9d. to 10d. per lb. being accepted for fair thin bright Malta strips, and 4d. per lb. for darker ditto. For good bright thick cut an offer of 6½d. per lb. was refused.

PAREIRA BRAVA.—Forty-five bales were offered, bold root, for which 60s. per cwt. is asked.

PATCHOULI-LEAVES.—Fourteen hales of old import, stalky, mouldy and very dusty, were bought in to-day at 3s. per lb.

PUREE.—Two cases imported in 1887 sold without reserve at 2s. 9d. per lb. to-day.

QUASSIA still continues to arrive freely, but quotations are unchanged, at 6l. 10s. for good old, and 5l. 5s. to 5l. 10s. for new wood. At to-day's auctions about 11 tons were all bought in at nominal prices.

QUICKSILVER.—The market is quiet, the principal importers quoting 8l. 5s., and there is small business being transacted in second-hand at 8l. 2s. 6d. per bottle. We notice an arrival this week of 480 bottles from Russia.

QUILLAIA.—The *Gulf of Trinidad* has brought 755 bales from Valparaiso.

QUININE.—No business is reported on the spot this week, second-hand German bulk being quoted at 10d. sellers, and 10½d. buyers. At to-day's auctions, however, 4,000 oz. of Whiffen's brand, warehoused in March, 1885, sold at 11½d. to 11¾d.; and 2,000 oz. of Zimmer's quinine, warehoused in 1888, realised 9½d. per oz.; this beating the previous lowest quotation on record. Howard's quinine is quoted by the makers at 1s. 2d. to 1s. 3d. in bulk, and 1s. 4d. to 1s. 5d. for bottles. The quotation for New York comes at 20 cents per oz. A sale of 10,000 oz. German bulk was reported on Tuesday at 10½d. per oz. The arrivals of quinine in New York are falling off somewhat as compared with last year. From January 1 to March 31 they were:—In 1891, 870,520 oz.; 1890, 1,078,400 oz.

RHUBARB.—There was a large supply of about 140 cases to-day, but holders being anxious to make headway 93 cases sold at low prices as follows:—*Shensi*: For druggists' small round pale coat, 2s. 3d. to 2s. 4d.; rather rough ditto, 1s. 10d. to 1s. 6d. per lb.; round small to hold, three-fourths pinky, one-fourth dark fracture, slightly wormy, 1s. 6d. to 1s. 8d.; ditto rather rough flat, 1s. 7d.; fair pickings, 10½d. *Canton*: Wormy round, three-fourths pinky, one fourth grey, at 1s. 2d.; ditto flat, 1s. 1d. to 1s. 2d.; ordinary small and very wormy at from 7½d. to 9d.; and pickings at 10d. per lb. *High-dried*: Medium to bold good bright coat, nearly all pinky fracture, flat, at 1s. 4d.; smaller at 1s. 3d.; slightly wormy, half grey fracture, at 9d. to 10d.; very wormy ditto, 8d. to 9d. per lb. A few lots of *Rhapontica*, rather wormy, sold without reserve at the low price of 1½d. per lb.

SARSAPARILLA.—Good *Honduras* root is worth about 1s. 6d. per lb., but none was offered. At to-day's auctions, 3 hales damaged chumpy *Guayaquil* sold at 7d. per lb.

SENEGA.—Ten hales chumpy root of good flavour are held for 1s. 8d.; two hales damaged selling at 1s. 7d. per lb.

SENNA.—*Tinnevelly* leaves in small supply. Of about 130 packages, which were mostly bought in, fair small and medium green selling at 2d. to 2½d., ordinary dark and damaged at 1½d. down to ½d. per lb. Thirty-six packages *Alexandrian* all bought in—pods, which are scarce, at 2s. per lb.; good bright medium leaf at 1s. 6d. to 1s. 7d.

SHELLAC.—The market for delivery is very dull, and at the auctions on Tuesday of 1,553 cases catalogued 674 cases sold at a decline of 2s per cwt. on second orange, 1s. on



garnet, and 4s. to 5s. on button lac. The following prices were paid:—Fine ASSL reddish, 73s. to 74s.; second orange, worked, ordinary reddish broken, 61s.; one lot, 62s.; ordinary livery ditto, 60s. to 61s.; unworked, fair palish, 62s. to 65s.; ordinary to fair reddish, 60s. to 62s.; ordinary livery, 60s.; common ditto, cakey, 57s. to 59s. Button, 308 chests offered and 103 sold, unworked, ordinary firsts, 71s.; good seconds, 70s.; ordinary ditto, a few chests, at 63s.; good thirds, 65s. Garnet, 90 chests offered and 35 sold, worked, AC good strong, 66s.; ditto curly at 65s.; unworked, fine flat, 65s. According to Calcutta advices, dated March 25, there was a good demand on the market for button lac, with very little available, and prices were advancing daily owing to purchases against non-deliveries.

**SIMAROUBA.**—The current quotation for this bark from New York is 5½d. to 6d. per lb., c.i.f. terms.

**SOY.**—China soy is dull of sale: 1s. 2¾d. per gallon would probably still be the nearest value. A few days ago sales were reported at that figure.

**SPERMACELE.**—New York reports (under date of April 1) an improving market. Large orders from England, it is said, would be placed if the refiners showed some disposition to meet the markets, which is not the case, 1s. 6¾d. to 1s. 7¾d. per lb. c.i.f. being their quotation.

**STICKLAC.**—Higher prices have been paid, and 60s. is now required for good Siam, though we have not heard of any sales above 55s., which was paid some time ago.

**STROPHANTHUS.**—There has been a strong demand for the gennine green Kombe seed, of which a parcel is said to have been shipwrecked on the way; only a small quantity remains, for which from 12s. is now asked, and we hear that 10s. has been refused. At the auctions about 190 lbs. West African brown seed were bought in at 1s. 6d. per lb., an offer of 8d. being refused.

**TAMARINDS.**—There has been rather more inquiry for East Indian tamarinds lately, the quotation for fair Calcutta being now 9s. 6d. per cwt.

**TEA.**—The market has been liberally supplied with all kinds this week, but prices have kept up all round, and, in some cases, are firmer. A heavy Congon sale on Tuesday sold at steady prices for all lower grades, and siftings fetched 4½d. to 4¾d., while commonest to fair common Newmake sold at 6d. to 6½d. A chop of "Crack Chop" Soomoo sold at 9d., a price very far below what had been asked earlier in the season, but poor tea. The Assam sales for the week have been heavy, but a very strong tone has been maintained, partly influenced by the knowledge that it will probably be the last heavy week of the season, and that Wednesday sales are to be discontinued. Very little tea worth touching can be bought under 10d., but there are still some good 1s.-Pekoes to be picked up here and there, and these are likely to be wanted later. Ceylons sold on Tuesday at a distinct advance on quotations of the previous week for lower grades, but, with large quantities coming forward, easier prices may be looked for again.

**TONQUIN BEANS.**—Twelve cases were offered to-day, but none sold. For foxy *Pera*, 2s. 9d. to 3s. per lb. was asked; and for good small frosted, 3s. 7d. to 3s. 9d.

**TURPENTINE.**—The collection of turpentine in France has been much retarded by the backwardness of the season, and prices have advanced in consequence. If quotations for spirits of turpentine should experience a further rise such articles as turpinhydrate and terpinol, now quoted respectively at 4s. 6d. and 7s. 3d. per lb., are likely to be affected.

**VANILLA.**—A considerable supply sold to-day at a decline of about 1s. per lb. all round; very fine 7 to 8½ in., 13s. to 17s.; 6 to 8½ in., 9s. 6d. to 13s.; cottony 3½ to 5 in., 8s. to 9s.; fair to good chocolate, irregular lengths, from 5s. 9d. to 12s.; ordinary foxy and brown, down to 3s. per lb.

**WAX (BEES').**—A considerable supply was very eagerly competed for, especially in Madagascar wax, which advanced from 5s. to 7s. 6d. per cwt., while Jamaica was about 2s. 6d. dearer. The following prices were paid: *Jamaica*: fine orange and yellow, 7l. 7s. 6d. to 7l. 12s. 6d.; good red and brownish from 7l. to 7l. 5s. *Australian*: good mixed colour, 6l. 10s. to 6l. 17s. 6d. *Madagascar*: fine orange, 140s.; fair, brown and chocolate, partly slightly wormy, 125s. to

137s. 6d.; dark brown, 115s. *French bees' wax* in 5 lbs. bars, good brown sold at 6l. 17s. 6d. Fair pale bleached *Calcutta* is held for 7l. Two cases *German* bleached from Hamburg realised 9l., and *Mogadore* wax is held at from 6l. to 6l. 10s. for fair to fine orange.

**WAX (JAPAN).**—For fair pale squares 42s. 6d. per cwt. is asked, but the market is dull.

## CHEMICALS IN THE NORTH OF ENGLAND.

THERE has been rather more doing in chemicals during the week, but prices have been slightly in buyers' favour, owing to some second-hands offering under union prices.

**BICARBONATE OF SODA** easier at 6l. 15s. to 7l. per ton in 1-cwt. kegs, f.o.b. Liverpool.

**BLEACHING-POWDER.**—Rather more doing in the Tyne market, and prices firm. Softwood casks, 6l. 15s. per ton; and hardwood casks, 7l. per ton, f.o.b. Tyne. Liverpool prices, 6l. 12s. 6d. on rails for softwoods, and 7l. per ton for hardwoods, f.o.b. Liverpool.

**CAUSTIC SODA** continues steady; 77-per-cent. has been reduced to 12l. 7s. 6d. per ton, net; 70-per-cent. quoted 11l. 10s. per ton, less 1 per cent., f.o.b. Tyne. Liverpool quotations: 9l. 15s. per ton for 60-per-cent., 11l. per ton for 70-per-cent., and 12l. per ton for 74-per-cent., f.o.b. Liverpool.

**HYPOSULPHITE OF SODA.**—Very firm at 7l. per ton in 5 to 7-cwt. casks, and 7l. 10s. per ton in 1 cwt. kegs, net cash f.o.b. Tyne; 7l. 10s. in casks, and 8l. per ton in kegs c.i.f. Liverpool; and 7l. 12s. 6d. and 8l. 2s. 6d. per ton delivered Manchester.

**SODA CRYSTALS.**—Slightly easier in Tyne market 2l. 15s. 6d. being quoted f.o.b. Tyne; Liverpool price 3l. 7s. 6d. to 3l. 10s. per ton f.o.b. Liverpool.

**SODA ASH.**—Very steady at 5l. 7s. 6d. per ton for 48-per-cent.; 5l. 16s. 3d. per ton for 52-per-cent.; and 6l. 10s. per ton for 58-per-cent. carbonated; 5l. 2s. 6d. per ton for 48-per-cent., and 5l. 11s. 3d. per ton for 52-per-cent. caustic, net cash; Tyne market quiet at 1½d. per degree, less 3½ per cent. for 48–52-per-cent. carbonated.

**SULPHATE OF COPPER.**—Quoted at 16l. 5s. per ton f.o.b. Liverpool.

**SULPHATE OF SODA.**—Easier at 37s. 6d. to 40s. per ton in bulk on rails at Widnes and St. Helens, and 42s. 6d. per ton free on rails or f.o.b. Tyne. Packed in casks for export price is 53s. per ton, less 3½ per cent. f.o.b. Tyne.

THE reason why druggists have a mortar and pestle for a sign is that they have to grind sixteen hours a day during seven days a week to make a living.

**ATROPAMINE**, the alkaloid recently discovered in belladonna by Hesse, differs from the other belladonna alkaloids, atropine, hyoseyamine and hyoseine, in that it has no mydriatic action, and it also differs from apotropine in producing a burning sensation and inflammation when dropped into the eye, apotropine being inactive. The composition of atropamine is  $C_{11}H_{21}NO_2$ , which is the same as for belladonnine.

**SHEEP DIP.**—Mr. G. Craig, of Dalry, has obtained a patent (No. 889), for the manufacture of a sheep dip. This invention relates to combinations of phenoloids. He takes crude oil gas of tar and agitates it with an alkaline polysulphide, heat is then applied, and after settling, the compound of phenoloids, alkali, and sulphur is separated from the supernatant oil, and may be further purified.

**HOW TO CURE A HEADACHE.**—In cases of the ordinary nervous headache from which women suffer so much, says an authority, remove the dress-body, knot the hair high up on the head, out of the way, and, while leaning over a basin, place a sponge soaked in hot water, as hot as can be borne, on the back of the neck. Repeat this many times, also applying the sponge behind the ears, and very frequently the pain promptly vanishes.





### Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish: if you do not, please use a distinctive nom-de-plume.

Write on one side of the paper only; and devote a separate piece of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers, please mark what you wish us to read.

Ask us anything of pharmaceutical interest: we shall do our best to reply.

Before writing for formulae consult the last volume, if you have it.

Letters, queries, &c., will be attended to in the order received.

### Pharmaceutical Etymology.

SIR,—I read with much pleasure the letter of Mr. C. C. Bell, in your issue of April 11, on the derivation of the word "chemist," and I freely concur with him in his recommendation of the concise and large dictionary of Professor Skeat, with which, and his "Principles of English Etymology," I have been long familiar. But to all your readers who take an interest in the derivation of words and the effects of time on the spelling of words, I would recommend the "Historical Dictionary," which is now being published by Dr. James A. H. Murray, at the Clarendon Press, for the Philological Society.

The following quotation may not alone interest your readers, but will serve to show somewhat of the value of this great work, which has for so many years engaged the Philological Society:

"Chemic (ke-mik), *a.* and *sb.* forms: a 67 chymick(e), chimick(e), 7 chymique, ike, 8-9 chymic, 8- chemic. [a F. *chimique*, or mod. L. *chim- chymic*, *us*, for med. L. *alchymicus*; see AL-CHEMIC] *Chymicus* began to take place of the earlier word, after the Renaissance, under the influence of etymological studies and recognition of the Greek words (*chymos*, juice, *chymik-os*, of or concerning juices, *chymeia*, infusion) considered to be the etymological source, it being held that chemistry was really *c chymike* (*technic*), 'the infusory art.' The modern spelling *che-* in this word-group is based on the fact that *chemia*, *chemeia* is actually found in Greek c. 300: see ALCHEMY." Then follow thirty-four quotations, beginning with one from Baker's "Jewel of Health," A.D. 1576, and ending with one from the *Times* in A.D. 1886.

The work deserves the support of every lover of the English language, and for those who take a pleasure in philology it is invaluable.

7 Cavendish Row, Rutland Sq., Yours truly,  
Dublin, April 14. GEORGE FOY, F.R.C.S.

SIR,—Apropos to Mr. C. C. Bell's interesting letter, there is a line in *Macbeth* (original edition) which shows that the word "chyme" in Shakespeare's day signified a "mixture":—

"What rhubarb-chyme, or what purgative drug,  
Could scour these English homes?"

In modern editions "senna" has been absurdly substituted.

Yours respectfully,  
Wolwyn, April 13. EDMUND LAWRENCE.

SIR,—Though I do not know Mr. Seaton's authority for his derivation of the word "chemist," I would refer Mr. C. C. Bell to the English translation of Gren's "Principles of Modern Chemistry" (London, 1800), in the introduction to which the author says: "No doubt the Egyptians were, before other nations of high antiquity, acquainted with a great number of such experiments, and practising such operations as may be called chemical, their country has undoubtedly, in the course of time, given birth to the name 'Chemia.'"

Plutarch ("Isis et Osiris," page 364) says that Egypt is sometimes called "Chemia." Gren also says: "Chemia signifies, according to the original sense, the 'black of the eye'; but also the 'hidden,' or 'secret,' has been hieroglyphically signified by this word, as in the Arabic, according to Bochart. 'Chema' signifies 'occultare.' In later times the word "Chemia" was made use of to signify the science of nature, or, rather, magic, and especially the art of *making* gold and silver. Julius Maternus Firmicus, who lived in the age of Constantine the Great, is the first author making use of the word "alchemy," which he describes as a very well-known art.

42 Castle Street East, Yours, &c.,  
Oxford Street, W. EDWARD H. STOREY.

18/61. Mr. J. Burt writes to know the derivation of "potte-powder," as applied to stannic oxide.

"Tinet. Patiros."

SIR,—With reference to Mr. Bell's query concerning the above, may I suggest that it is probably an alliteration of *patrinios*, *patrinia* *jatamansi*, or *nardostachys jatamansi*—the *Nardus indicus*, generally regarded as the ancient spike-nard. C. M., JUNR. (23/54)

Birmingham, April 14.

### Symbols and Insignia.

SIR,—A friend in the United States writes:—"I am endeavouring to make a complete collection of pictorial illustrations of the various badges and insignia that have been used from time to time in all ages to characterise or distinguish the professions of pharmacy, chemistry, medicine, surgery, and the allied sciences, including alchemy, and pharmaceutical or medical colleges or similar bodies. Will you give me what assistance you can in this matter by describing such signs as may be known to you, or referring me to publications containing these particulars?"

Can any readers assist me?

Faithfully yours,  
Newcastle-on-Tyne, April 4. GEORGE WEDDELL.

### Periodohydromethyloxyehinoline.

SIR,—In your last week's "commentary" upon Dr. Mortimer Granville's new method of treatment for cancer, his improved remedy, a "periodohydromethyloxyehinoline" is described by you as "an iodo-derivative of antipyrin." As this is not really the case, we think it right to mention that the compound in question—which we prepared at the request of Dr. Granville—we believe to be chemically a thallin derivative. But, as the medicinal properties were found by Dr. Granville so distinct from those possessed by normal thallin compounds, he wished it to be prescribed under a distinctive name. We therefore suggested that the assumed base might be *provisionally* known by the name at one time applied to thallin, as indicating its connection with chinoline, from which it is manufactured.

We are, Sir, yours faithfully,  
April 15. SQUIRE & SONS.

What's in a Name?—SIR,—I send you a cutting from a communication of J. Mortimer Granville's to *The Lancet*, No. 3,527, p. 798, which, when found, make a note of:—"Instead of thallin I use a periodohydromethyloxyehinoline because that is better borne, and seems to be more effective than the tetrahydropararquinazol." These two words would be a good penn'orth in a telegram. Yours,

EPIGRAMMATIST. (A correspondent of "Punch.")

### Glycerine Cement—Toluidin.

SIR,—While fully admitting that it is desirable to adopt an attitude of scepticism towards many of the formulae which crowd the columns of the technical press, and are without inquiry imported into those of "semi-scientific newspapers," I have noticed with some amusement the scathing criticism of glycerine and litharge as a cement, made under



the "Miscellaneous Inquiries" heading in your last issue. Permit me to point out—firstly, that this mixture was introduced by Rost as long ago as 1872, and has since then been mentioned at least three times in that most accessible of works of reference, the "Year Book of Pharmacy," once (1880, p. 348) with some detail, and in a citation from no less an authority than "Dingler's Journal." Secondly, that from personal experience I am able to write of it as a very good cement indeed, which does all that has been claimed for it. When properly made—which means that the lead oxide must be *very* intimately mixed with the glycerine—it sets firmly in a few hours or days as the proportion of glycerine is less or greater, and gets harder as it grows older. For mending rough earthenware it is invaluable. I have no doubt that there are many other applications for which it has been, or may be, found equally useful. Thus, Sir, it will be seen that it by no means follows that because a formula *seems* unlikely, it should be dismissed as unworthy the trouble of an experiment.

In Mr. R. Wright's marking-ink receipt (*C. & D.*, March 21) ortho-toluidin is mentioned as a solid body, and this view is apparently endorsed by yourself in an answer to a correspondent in your last number. The body intended is evidently *para*-toluidin, which is a solid; while the *ortho*, sometimes called, curiously enough, *pseudo*-toluidin, is a liquid.

Yours faithfully,

HARRY NAPIER DRAPER.

Dublin, April 13.

SIR,—Several months ago I noticed, in a photographic periodical, the above cement recommended for repairing developing-dishes. Having in hand a large mortar which had given way at an old and gradually extending crack, I rubbed up a little litharge with glycerine to the consistence of treacle, smeared over the broken edges, bound the mortar with a strong twine, and set aside for several weeks. The mortar is now in almost daily use, but, of course, is only used for mixing powders. The exuded cement which was scraped off was of the consistence of a stiff extract.

Yours, &c.,

J. G. F. (22/47.)

SIR,—I remember an engineer some years ago telling me that the best cement he knew was a mixture of glycerine and litharge. I think the success in making lies in the proportion of the ingredients and the manner of mixing. He mixed a little glycerine with the litharge, and beat it into a stiff plastic cake with a hammer.

I prepared a little to-day by adding sufficiency of glycerine to make a damp powder (not paste), then beating it with a heavy iron pestle in an iron mortar. It set within an hour.

Fountainbridge, Edinburgh. DUNCAN MCGILSHAN.

#### Liebreich's Discoveries.

SIR,—Hardly has the world recovered from the shocking discovery of Tuberculinum Kochii and the unsatisfactory results which have arisen from it, another great invention from the Fatherland, apparently of equal value, is making its way over the globe.

I refer to Dr. Liebreich's hypodermic administration of Cantharidinum. Frequently have I heard the question raised, Whatever made Liebreich think of Cantharides in connection with the treatment of consumption? Everybody will have thought this invention was the result of careful physiological experiments, but, as we shall see from the following extract of the "Deutsche Tageblatt," Professor Liebreich has only followed the same track as Professor Koch, who hastily applied Jenner's and Pasteur's ideas in the wrong direction with such fatal results. The article says: It will perhaps be of interest to receive some genetic explanations on the medical discoveries of Professor Liebreich, who, as we know, recommended some time ago Cantharidinum as a hypodermic injection for tuberculosis of the larynx. Some years ago, Professor Liebreich surprised the medical world by the discovery of Lanolinum, which he employed for skin diseases. He patented this invention, together with Messrs. Jaffe and Darmstaedter, who have established an excellent business in this article. The writer, who is somewhat acquainted with the works of Pliny, soon discovered that

this so called "Lanolinum Liebreich" was a preparation very well known to the old Romans and that it was strongly recommended by Pliny the Elder (vide Pliny, Nat. History, b. 29, ch. 10) for the same purpose for which Liebreich recommends it now. When Professor Liebreich brought forward his latest discovery this year, the writer naturally again made reference to Pliny the Elder, and was not surprised to find, a few pages after the description of Lanolinum in Pliny (b. 29, ch. 30) that an Egyptian physician at the time of Tiberius employed an extract of Cantharides in the same manner as Professor Liebreich recommends it, for the cure of a disease similar to Lupus (vide Pliny, b. 26, ch. 2). Pliny deals, in connection with the Lanolinum, also on the great efficacy of eggs, which he recommends for erysipelas, burns, &c. We may therefore to-day perhaps prophetically predict that Professor Liebreich will next year discover the "Ovinum," in order to harmonically conclude the circle of his scientific discoveries.

I am, Sir, yours obediently,

BEN AKIBA.

#### city of Pharmaceutical Certificates.

SIR,—It is to be hoped that the letter of the President of the Pharmaceutical Society of Queensland in your issue of April 4 will be the means of having a reciprocity clause introduced into the Pharmacy Act Amendment Bill, now before the House of Commons. The subject has been discussed and delayed so long that the good services of some member interested in the drug trade should be enlisted to bring about so desirable a result. Yours obediently,

April 8.

DEVON. (19/36.)

#### Drug Contracts.

SIR,—I notice your remarks on drug contracts (April 4), I think the first object should be quality, to get the best drugs and have them examined by a competent man. I recollect many years back a list from a public institution to be priced and competed for. In it was virgin scammony 3 lbs. The gentleman who had the contract supplied an article which cost him 34s. per lb. They returned it saying "could not use such rubbish." The warehouseman hardly knew what to do. It was suggested they did not know the virgin, so sent them Aleppo, costing 18s. They sent back to know how much more this would be. I saw both articles myself. Thus you will see the necessity to have competent examiners.

One who has left the trade many years, but still feels sufficient interest to take THE CHEMIST AND DRUGGIST. Branscombe, April 9. (20/5.)

#### Explosion of a Glass Mortar.

SIR,—As I was dissolving 5j. of plumbi. acet. in 2 oz. aqua in a 4-oz. glass mortar, and about to pour into bottle, the mortar exploded with a loud noise, and left me with the pestle in my hand. On examining the broken mortar, the largest piece weighed a little over 80 grs.

Largo, Fife, April 4.

S. G. (21/68.)

[We have at various times recorded a number of similar cases: tumblers exploding when a scidlitz powder is being mixed, &c. The cause is the stirring. A peculiar touch of the pestle on a particular spot of the glass suddenly disturbs the molecular cohesion, and the vessel is shattered into fragments.]

#### Out-door Apprentices.

SIR,—Will you kindly inform us in your next issue, if you can make it convenient, what are the usual conditions of out-door (living with parents) apprenticeship at present time, including length of term, and premium, if any?

EBSON. (22/55.)

[Three years and no premium we should state as the usual conditions in England; the same period, and 10l. to 20l. per annum in Scotland. Correspondents, please correct us if wrong.]



## DISPENSING NOTES.

*The opinions of practical readers are invited on subjects discussed under this heading.*

## What is Meant?

WE have a few more letters on this matter. It is only necessary to notice the following briefly. The prescription, it will be remembered, was:—

Solut. hydr. perchlorid. . . . . ʒiv.  
Strength to make each teaspoonful = 1 in 5,000

Sig. Add two teaspoonfuls to  $\frac{1}{2}$  gallon of water for bath.

20/2. *F. R.*, in support of his solution—112 grains of mercuric chloride to the 4 oz., as opposed to double that quantity—says: "The great point is that those who give the latter amount say ʒj. to  $\frac{1}{2}$  gall. of water, but the prescription distinctly says 'ʒij. to  $\frac{1}{2}$  gall.' of water. Now, if we make the solution with 7 grs. to ʒj., and then wrote the label, what would be the result? ʒij. are put to  $\frac{1}{2}$  gall. of water, and the mixture would be just double strength—viz., 1 in 2,500. I have asked the opinion of three medical practitioners, and they also agree with me. I have had a few years' hospital dispensing, and this was a very common mode of ordering hydrarg. perchlor. The best thing would be if the chemist could consult the prescriber, and show the reason why he asked, and then let us know result."

21/65. *Edmund Lawrence* says: "Two questions were propounded:—(1) What did the prescriber mean? (2) What quantity of perchloride should be used? Respecting question 1, after reading the instructive letters elicited, I have little doubt that the prescriber meant a bath of 1 grain in 5,000. But, as to question 2, there can be no doubt that the words of the prescription signify a solution 1 grain in 5,000 = .35 in 4 oz. Would it not, therefore, in view of Mr. Coroner's eccentricities, be the duty of a dispenser to make himself or employer secure by following *verba ipsa*?"

## A Quinine Mixture.

SIR,—I should feel obliged if you could suggest a remedy for the following difficulty:—I put up a tic nervine balsam, and, after a day or two (especially in winter), long acicular crystals are deposited on the bottom and sides of the bottle. What addition or alteration would you make to obviate this? The following is the formula:—

Quiniæ sulph.	..	..	..	gr. xij.
Tr. ferri perchlor.	..	..	..	ʒij.
Liq. morph. mur.	..	..	..	ʒiiss.
„ ammon. acet. conc. (B.P.)	..	..	..	ʒss.
Acid. hydrobrom. dil.	..	..	..	ʒj.
Aq. ad ..	..	..	..	ʒvj.

M.s.a.

Tic. (22/2.)

[The crystals are acetate of quinine, formed by interaction of the quinine sulphate and ammonium acetate. The solution of the latter is useless, and should be omitted.]

22/64. *Cambria*.—Yes. Next time send your name.

## Iodide Mixture. (260/52)

SIR,—I have made two quantities of this mixture—one as written, the other with glycerine instead of ext. glycyrrh.liq.—and both seem permanent, there being as yet no sign of free iodine. As you say, the reaction producing free iodine does not usually take place with scale-preparations. Are they always ferric, although made with freshly-precipitated ferric oxide?

ADELAIDE. (163/91.)

9/5. *Carbolic Acid in Pill*.—A good excipient is to use some p. trag. co., and a few drops of water if necessary.

ADELAIDE. (163/91.)

## LEGAL QUERIES.

20/8. *Yorkshire*.—Anyone may draw a tooth and make a charge for doing so, but only a registered dentist can recover on such a claim in a law court.

22/20. *P. J. D.*—There is no legal objection to your card. You must not in any way describe yourself as a dentist, nor can you recover in a court of law for dental operations, but you are entitled to perform them and get paid for them if you can.

21/66. *Rheum*.—It is legal for anyone to adopt any name he likes for trading purposes so long as he does not by so doing infringe on anyone else's trading rights. But it is not strictly legal for a registered chemist to sell and label poisons under any but his own name. But this illegality is committed in such high quarters that it can hardly be dangerous. See *DIARY*, 1891, page 329. Every member of a firm must be registered. Apply to the Secretary of the Pharmaceutical Society about associateships.

19/38. *F. S. F.*—The widow of a chemist and druggist can only carry on the business of her deceased husband if she is his executrix or administratrix. She must employ a qualified assistant.

20/6. *Yorkshireman*.—The model regulations of the Board of Trade provide that "any duly stamped weight or measure, or any weighing instrument found by the inspector to be in use for trade before January 1, 1891, may continue to be used, or may be stamped, provided it be found by the inspector to be correct, and that it is not constructed in such manner as to facilitate the commission of fraud." Local authorities may, it appears, make their own requirements. You should ascertain what these are.

22/41. *Abbott*.—The claim made by your rival is absurd if it rests simply on the copyright of his pamphlet. It would be impossible, by any sort of registration, to secure a monopoly in such titles as those you mention. It is conceivable that one of you may have so imitated the business methods of the other as to make it possible for an injunction to be applied for, but we do not see sufficient evidence of this in the papers you send.

21/18. *Justice*.—Chloroform is a poison within the meaning of the Pharmacy Act, 1868.

20/71. *Climax*.—"Seidlitz-powder" is not given in the Pharmacopœia (Additions) as a synonym for pulv. sodæ tart. effervescens. It is simply stated in a foot-note that "effervescent tartrated soda-powder is commonly known as seidlitz-powder." This would not necessarily justify a prosecution under the Sale of Food and Drugs Act if something different were sold under the name "seidlitz-powder"; but it would furnish strong presumptive evidence. See article on the subject, page 784 last volume (December 6, 1890).

22/70. *Bridge*.—By an Inland Revenue Act of last year it was provided that every excise licence (except that of an auctioneer, appraiser, or broker) should only authorise the person licensed to carry on business in one set of premises. Extra licences for patent medicines, methylated spirit, &c., must now be taken, therefore, for every shop.

159/29. *Alpha*.—The graph-composition patent will be in force until November 13, 1892.

22/65. *Alpha*.—Jahncke's patent for making small tin boxes is void.



## MISCELLANEOUS INQUIRIES.

*Correspondents who ask replies to be inserted "this week" or "next week" are reminded that we do not guarantee replies, and that their insertion depends upon the space at our disposal for such matters. It is generally impossible for us to find room for queries the same week they are received.*

244/45. *Amylum* (Calcutta).—You will find the cream of information regarding the **Manufacture of Varnishes** in **THE CHEMISTS' AND DRUGGISTS' DIARY, 1890**. A very good book is Cameron's "**Oils and Varnishes**," published by Churchill. The various **Enamel** paints have an oleo-resinous basis, such as this:—Copal (or similar resin), 1 part; boiled linseed oil, 9 parts; turpentine or light camphor oil, 2 to 4 parts. The resin has to be heated carefully to about 140° C., and the linseed oil added to it at about the same temperature. It requires experience to know when and how to mix the resin and oil properly, so as to obtain a solution. The turpentine is merely added to thin the basis, which should be done when cold.

19/8. *S. G. B.*—(1) Directions for making the **Many-coloured Show-bottle** are given in our issue of August 31, 1889, page 309. (2) **Crystals fit for Exhibition** may be made by suspending a cord, or wire shaped to the form desired, in warm saturated solutions of the salts required. A linen bag, filled with the powdered salt, should also be suspended in the solution, so as to replace what is taken out. The cord or wire should first get a slight deposit of the crystals on it, by dipping in a boiling solution and allowing to dry.

16/50. *Taprobane* (Ceylon).—(1) You do not mention the number in which the reply was contained, and we cannot trace it; but filtration through paper would doubtless be meant. See a similar process for the **Estimation of Caffeine** in our issue of February 21, page 259. Of course, on the manufacturing scale processes have to be very considerably modified. Filtration, for instance, is generally done with a filter-press, using closely-woven canvas as the filtering medium. Canvas without the press may do in your case. (2) We forwarded replies to you recently. (3) The absence of quotations for croton seeds shows that none have been offering. We shall keep the matter before us.

13/17. *Pharmacist*.—Griffith's "**Manures**" (G. Bell & Co., 10s. 6d.) is a safe book on manures. There is none on the analysis of cattle-foods that we know of. Some useful instructions appeared in a report of the Highland Agricultural Society about seven years ago.

17/54. *W. T.*—**Ringworm in Cattle**.—The following application is recommended:—

Acid. carbolic.	..	..	..	..	3j.
Sp. v. meth.	..	..	..	..	5vj.
Glycerine	..	..	..	..	5vj.
Aque	..	..	..	..	5vj.

M.

To be applied with a small brush on three consecutive days.

22/26. *C. J. B.*—We are sorry to hear that two wholesale houses are unable to supply you with **Kieselguhr**. That shows a want of enterprise somewhere. We could give the names of merchants who deal in the article largely, but they would not supply lots of a few pounds' weight. Tons are more in their way. So much **Kieselguhr** is used in the manufacture of dynamite, disinfecting-powder, and the like, that it seems incredible that suppliers of retail chemists cannot oblige their customers by stocking it.

16/31. *Dens.*—In almost every volume of **THE CHEMIST AND DRUGGIST** you will find formulae for dentifrices, which by slight modification can be made to suit your purpose. In our issue of May 3, 1890, page 599, there is a formula for a **Liquid Foaming Dentifrice**, which by alteration of perfume and the addition of carbolic acid would suit your purpose. The basis for such dentifrices is quillaia. The following, for example, may be taken as an all-round basis to which any perfumes, antiseptics, or colouring may be added in due proportion:—

					Oz.
Quillaia, in coarse powder	..	..	..	..	1
Rectified spirit	..	..	..	..	3
Glycerine	..	..	..	..	1
Water	..	..	..	..	6

Mix the liquids, and macerate the quillaia in the mixture for seven days, agitating daily. Then strain, press the marc thoroughly, and filter.

It is unnecessary to make up this extract to a specific volume. For a **Carbolic Dentifrice**, flavoured with lavender, you might try the following:—

The above basis	..	..	..	..	4 oz.
Carbolic acid	..	..	..	..	10 grs.
Oil of lavender	..	..	..	..	20 mins.
Otto of rose..	..	..	..	..	5 "

Colour a pale yellow with tincture of saffron, and then add a mere trace of aniline violet.

It is as well to keep in mind that all the foaming dentifrices lose the frothing property in the course of time. For **Carbolic Tooth-powder** you may try the following:—

Terra alba, fine sifted	..	..	..	..	8 oz.
Orris powder	..	..	..	..	1½ "
Powdered white soap	..	..	..	..	½ "
Carbolic acid..	..	..	..	..	30 grs.
Camphor	..	..	..	..	30 "
Otto of rose	..	..	..	..	10 drops
Solution of carmine	..	..	..	..	10 "

Rub up the otto and carmine solution with the terra alba ounce by ounce for ten minutes, and set aside. Rub the carbolic acid and camphor in a mortar until liquid, then mix the orris with it and the soap. Mix those with the perfumed terra alba, and sift.

18/53. *W. G. S.*—**Mistura Ferri Aperiens, U.C.H.**:—

Sulphate of magnesia	..	..	..	..	60 grs.
" iron	..	..	..	..	4 "
Diluted sulphuric acid	..	..	..	..	9 mins.
Peppermint-water to	..	..	..	..	1 oz.

Dissolve and mix.

18/48. *F. O. G.*—All the recipes we have for glycerine and cucumber contain the pomade. You should try the compound offered by advertisers in this journal, to which only water and glycerine have to be added. We have tried Rouse & Co.'s, which is excellent.

18/44. *W. L.*—We have never heard of sulphuric acid being used in aerated waters in the manner which you mention. It is sometimes added to soluble essences to neutralise alkali.

18/56. *Sapine*.—You can utilise the isinglass by macerating it in double its weight of water, and when it is soft, adding as much glacial acetic acid and dissolving by the aid of heat. This will make a good cement.

22/12. *J. Thompson*.—You will find a formula for **White Oils** in our issue of April 4.

19/10. *Stuart*.—There is a useful volume on "**Brewing**" in Churchill's **Technological Series**.

22/66. *R. G. M.*—Your "**King's College M.D.**" has cribbed the formula *verbatim* from us. It was published in the **DIARY** for 1881.



21/5. *Student*.—Write to the Secretary, Apothecaries' Company, Blackfriars, London, E.C., in regard to the assistants' examination.

22/16. *G. D. P.*—Books for Counter-prescribing.—We repeat that there is no book published on counter-prescribing except our DIARY of 1890; all the medical books which take in the treatment of common complaints are popular; none are specially intended for chemists. What you must do is to combine the popular and the purely medical works. Thus, of the former, there is no better cheap work, dealing with common complaints, than Begbie's "Medical Information and Advice" (Nelson, 2s. 6d.), and along with this you may read Hooper's "Physician's Vade Mecum" (10th edition, 1882, 12s. 6d.). Sometimes second-hand copies of earlier editions of the latter can be picked up. In "Squire" there is a therapeutic index which is valuable in prescribing. There is an art in counter-prescribing, as there is in everything else, which books cannot teach, and the most important feature of the art is to know where not to prescribe.

21/59. *Reader Abroad* (Natal) asks: "What is the best way to remember drugs incompatible with one another?" The royal road is a knowledge of pharmaceutical chemistry; mnemonics is useless here. There is a very good list of incompatibles in "The Art of Dispensing," and a careful study of the work as a whole conduces towards a solution of the difficulty. This is not a matter of memory, however; it is skill and knowledge.

22/28. *Bowman Smith* asks: "Could you kindly tell me the tribe of people who file their teeth to points, and their reason for so doing?" There are several who do this in Africa; but perhaps the tribe our correspondent is thinking of is the Dyaks of Borneo. Custom is what makes them do it; they think it the proper thing, just as shaving is with some of us.

22/63. *W. P.*—Sir Morell Mackenzie's "Manual of Diseases of the Throat" (10s. 6d.), or his "Hygiene of the Vocal Organs" (6s.), would aid you in your study preparatory to devising a lozenge.

#### Information Supplied.

*Liq. Ferri Pernit.*—In regard to "Ferrum's" inquiry, is it not the manufacture rather than the B.P. which is at fault? Did your correspondent attend to B.P. instructions about moderating the action, and heat, by dilution, if violent? My first experience, many years ago, taught me that lesson. I allowed the action to have its own way, when a dark liquid precipitating ferric oxide was the result, part of the nitric acid being decomposed, and the flask was so hot that it could hardly be handled. I, however, tried again, being careful this time not only to read, but to understand, the B.P., when I got a liquor which was satisfactory in every way.

ADELAIDE. (163/91.)

#### Information Wanted.

[Replies to the following requests are solicited by correspondents of THE CHEMIST AND DRUGGIST.]

155/33. An expert Suffolk rat-killer has been playing havoc with rats on Forfarshire farms. He feeds them for a day or two with a composition, of which they seem to be very fond, and then he introduces some poisonous material which kills them speedily. The poison has also the valuable property of converting the carcases into a sort of mummies, so that no offensive smell results. A correspondent is anxious to know what the Suffolk man (Cordle, his name) uses. This would be generally interesting, and we should be pleased if anyone could give the information.

13/49. Model head, with articulated jaws, for a dental show-case. Where obtainable?

#### VETERINARY COUNTER PRACTICE.

Now ready. Price 3s. 6d.; post free, 3s. 9d.; pp. 268.

(Uniform with "The Art of Dispensing.")

CONTENTS:—Medical and Surgical Treatment of Domestic Animals; Veterinary Medicines; Miscellaneous Veterinary Formulae; Diseases of the Horse; Lameness in Horses; Dentition of the Horse; Diseases of Cattle; Diseases of Sheep; Diseases of Pigs; Diseases of Dogs; Treatment of Eye Diseases; Wounds, Sores, &c., in Animals; Diseases of Poultry; Appendix.

We must remind purchasers that we cannot send copies of any of our publications for enclosures. Any of the wholesale houses will supply them. The following firms have already undertaken to stock "Veterinary Counter Practice" and our other manuals, and will supply any of them at the published price:—

Ayrton & Saunders, 149 Duke Street, Liverpool  
 Barelay & Sons (Limited), 95 Farringdon Street, E.C.  
 Boileau & Boyd, 91-93 Bride Street, Dublin  
 Clay, Dod & Co., 52 St. Anne Street, Liverpool  
 Duncan, Elbekhart & Co., 104 S. Canon Gate, Edinburgh  
 Edwards, Wm., & Son., 157 Queen Victoria Street, E.C.  
 Evans, Gadd & Co., 97 Fore Street, Exeter  
 Evans, Leseher & Webb, 60 Bartholomew Close, E.C.  
 Evans, Sons & Co., 55 Hanover Street, Liverpool  
 Ford, Shapland & Co., 6 Great Turnstile, High Holborn, W.C.  
 Glasgow Apothecaries Company, 32 Virginia Street, Glasgow  
 Harris, Phillip, & Co. (Limited), Birmingham  
 Holmes, W. & R., 5 Dunlop Street, Glasgow  
 Ismay, John, & Sons, Newcastle-on-Tyne  
 Lennon, B. G., & Co., Port Elizabeth  
 Lennon & Tebb, Cape Town  
 Lewis, H. K., 133 Gower Street, W.C.  
 Lloyd, T. Howard, & Co., Leicester  
 May, Roberts & Co., 9 Clerkenwell Road, E.C.  
 Newsholme, G. T. W., 74 Market Place, Sheffield  
 Oldfield, Pattison & Co., 17 Todd Street, Manchester  
 Pinkerton, Gibson & Co., Edinburgh  
 Potter & Clarke, Raven Row, Artillery Lane, E.  
 Raimes, Clark & Co., Edinburgh  
 Raimes & Co., York  
 Sanger, John, & Sons, 489 Oxford Street, W.  
 Silverlock, H., 92 Blackfriars Road, S.E.  
 Sonthall Bros. & Barclay, Birmingham  
 Sutton, W., & Co., 76 Chiswell Street, E.C.  
 Woolley, James, Sons & Co., Manchester

Our other Treatises are:—

"The Art of Dispensing." (280 pages.) 3s. 6d.; by post 3s. 10d.

Alpe's "Medicine Stamp Duty." (142 pages.) 2s. 6d.; by post, 2s. 9d.

Proctor's "Pharmaceutical Testing." (176 pages.) 2s. 6d.; by post, 2s. 9d.

#### AT THE COUNTER.

"Do you sell Gethsamene root?" was the question asked of a Birmingham pharmacist the other day. Gelsemium Root was supplied.

SPECIMENS FROM LAVENDER HILL, S.W.—"1d. paregoric 1d. matrimonial wine for a cough mixture; 1d. perfection of senna; tin of Brand's consecrated beef-tea."

"TO-DAY," writes a chemist from Haverstock Hill, "we were asked for a pennyworth of Aliy's Inkermann yellow. Basilicon was supplied. The other day we were asked for a stiffening powder for the baby. A Stedman's powder was sent."

"PLEASE can you give me something to rub the waxing-journals in the throat" is a document received by a chemist at Newcastle-on-Tyne.



# Pears' Soap



(25 inches high.)

*These celebrated Statuettes are supplied free to Retail Buyers upon conditions to be obtained on application to*

**A. & F. PEARS,**  
71-75 New Oxford Street, W.C.



# HEARON, SQUIRE & FRANCIS

WHOLESALE AND EXPORT DRUGGISTS,  
ANALYTICAL AND MANUFACTURING CHEMISTS.



**SOLE CONSIGNEES FOR SAINT MARCO LITHIA WATER.**

N.B.—The only natural Lithia Water ever awarded a Gold Medal.

**LATEST REMEDIES IN PHARMACY AND THERAPEUTICS.**

**SPECIALITIES—"HERON" BRAND.**

**ESS. PRO MIST. FERRI CO.**  
1-7.

It has the strong odour and bitter aromatic taste of good quality myrrh combined with the fragrant smell of volatile oil of nutmeg.

**EXT. EUONYMI LIQ.**

A reliable Hepatic and Intestinal Stimulant.

**EXT. KOLÆ LIQ.**

A strong Tonic and Stimulant to the Nervous System, a most successful remedy in Sea-sickness.

**EXTRACT OF MALT IN VACUO.**

Keeps perfectly, and possesses the characteristic flavour of malt.

**EXT. SALICIS NIGRÆ LIQ.**

A powerful Sexual Sedative, similar in its action to Potassium Bromide, but without its depressing qualities.

**EXT. SENNÆ LEGUMIN. LIQ.**

A non-irritating, tasteless, and certain Laxative in obstinate Constipation.

**LIQ. IPECAC. PRO VINO.**

1-19.

Contains  $1\frac{1}{4}$  per cent. of Emetine, and gives a Vinum Ipecac. that is *bright, stable, and uniformly active*.

**PEPSIN GLYCER. ACID.**

A strong solution of peptic principles of definite strength: a stable and digestive fluid of great activity.

**SOL. PEPSIN c. EUONYMIN.**

A Biliary Stimulant and Digestive Agent of pronounced efficacy.

**INFANTS' FOOD MALTED.**

Supplied in bulk and in tins with plain labels.

**FLUID EXTRACT OF MALT IN VACUO.**

**CONCENTRATED LIQUORS AND LIQUID EXTRACTS.**

**MANUFACTURERS OF EVERY CLASS OF PHARMACEUTICAL PREPARATIONS.**

Telegraphic Address—"FRANCIS LONDON."

**38 SOUTHWARK ST., LONDON.**



THE OLD ORIGINAL HOME OF COCA WINE (ARMBRECHT).

# COCA (ARMBRECHT) WINE



For Fatigue of Mind and Body.



CELLAR N° 6



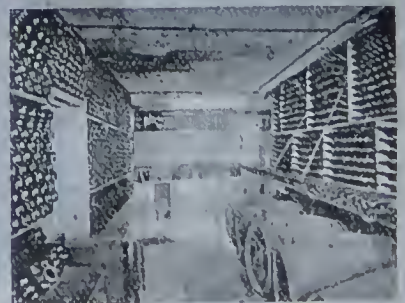
CELLAR N° 7.



STORE ROOM.



PHARMACY



STORE ROOM

**ARMBRECHT, NELSON & C<sup>o</sup>**  
 2, 3 & 4, DUKE STREET, GROSVENOR SQUARE.  
 LONDON.



# SKELETON OF A FINE PERUVIAN COCA LEAF

(Enlarged by Photography),



BY THE PROPRIETOR OF  
**ARMBRECHT'S COCA WINE, 2, 3, 4 Duke St., Grosvenor Square, LONDON.**



# AN UNSOLICITED CERTIFICATE OF THE EFFICACY OF ARMBRECHT'S COCA WINE.

N.B.—The following conversation between two Sweeps was overheard, and we have endeavoured to reproduce, as far as possible, the position of the Sweeps and the words, only the Sweep who asks if the Wine was good for Asthma was short, fat, and bent, but the artist has made him thin and erect, and we had no time to get it corrected.



1ST SWEEP.—What goes out in them there Boxes?

2ND SWEEP.—Why "COCA WINE"!!!

1ST SWEEP.—"COCA WINE." What air that? Good for Hashmer?

2ND SWEEP.—"Hashmer." Why, it's good for heverythink. Had a taste of it when I swept that old cove's chimbley, and jolly fine stuff it is, too.

*Tableau — — — Curtain.*

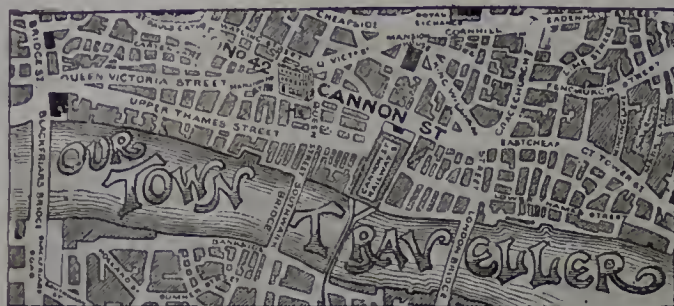
**ARMBRECHT, NELSON & CO., 2, 3, 4 DUKE ST., GROSVENOR SQUARE, LONDON.**

COME AND TASTE OUR HAPPY **MEDIUM.**

See page 59 (bottom folio), for Prices and Order Sheet.



# THE CHEMIST AND DRUGGIST, of March 7th, 1891, SAYS:



PROPRIETARY ARTICLES were what our traveller had chiefly in view on his rounds last month, his desire especially being to learn something of the way in which well-known medicines are produced, and to chat with the men at the wheels.

## ARMBRECHT'S COCA WINE.

The external appearance of the Duke Street Pharmacy, which is the present headquarters of Messrs. Ambrecht, Nelson & Co.'s coca-wine business, is indicative of activity rather than stately repose. The building is an old one, and, so far as outward and visible appearance of progress is concerned, the "future house of the coca wine," depicted in the advertising pages of our *DIARY*, will be a far more fitting temple for the business, which has grown up under Mr.



Ambrecht's care during the last decade, than its present abode. But the new building will not be quite completed, Mr. Ambrecht told us, until January or February of next year, although he expects to have the use of part of the basement before that time. That will be a considerable relief to him, for it is in respect of cellarage that he is worst off at present. The cellars under Nos. 2 and 4 Duke Street are now absolutely choked with casks.

Under the building now in use five cellars are used for the storage of wine and other purposes. At the time of our visit these contained 36 hogsheads and 7 pipes of wine in course of preparation. A hogshead holds about 56 gallons, a pipe double that quantity; but an average of the 2,800 gallons of wine in course of preparation is by no means sufficient to keep pace with the demand that has been created for Mr. Ambrecht's speciality. The prepared wine is left to mature, and the bottled goods are stored away in ten other cellars; and there are, in addition, two cellars devoted to the preparation and storage of "coca champagne"—a beverage which was added to the list of Mr. Ambrecht's specialities some time since.

Coca-leaves only are employed in the preparation of the coca wine. Mr. Ambrecht told us that he had tried hydrochlorate of cocaine also, but discarded it because it did not yield so satisfactory an article as the leaves. The idea of starting the manufacture of what has now grown into a considerable trade occurred to Mr. Ambrecht some ten years ago, when on a visit to a friend in Germany—a medical man who was enthusiastic in the praises of the remedy then newly discovered as a local anæsthetic. Mr. Ambrecht had been paying some attention to the production of a new speciality for fatigue and insomnia, and he decided to experiment with the coca-leaf in this direction. At first his manufacture was quite in the nature of an experiment, but some of his customers and a few medical men gradually gave him hints which he turned to good use, and these, coupled with his own researches in the properties of the coca-leaf and its principles, gradually enabled him to build up his present trade. His first purchase of coca-leaves amounted to 2 lbs., while the last order he gave to a firm of brokers two months ago was, he told us, for half a ton. Mr. Ambrecht uses the pale-green leaves by preference, as they contain least mucilage. During the first period of manufacture it was usual to press the leaves to extract all the valuable constituents; but that manipulation is now dispensed with for the sake of obtaining a clearer product. For the manufacture of extract, however, the leaves are still subjected to pressure, and we were shown a hand-press, in one of the cellars, which is occasionally used, and can be worked by two men so as to yield a pressure equal to 80 tons.

The question of how to regulate the absorption of the coca alkaloid by the wine so as to ensure constancy is one of Mr. Ambrecht's two trade secrets, but he assured us that no wine ever left his place which was not carefully tested in this respect. There are just half-a-dozen varieties of wine in Mr. Ambrecht's list at present—"medium," Burgundy, Malaga, port, sherry, and champagne. The composition of the "medium" wine, which has by far the largest sale of the six varieties, is Mr. Ambrecht's second trade secret. Suffice it to say that he introduced this wine at the instance of Dr. Spencer Wells, as a kind of compromise between the Malaga, which was generally considered too sweet, and the Burgundy, which found some objectors on the score of tartness of taste. Next to the "medium" wine, Burgundy is the grade most frequently asked for; then follow, in order of importance, Malaga, sherry, and port. The demand for the champagne fluctuates very considerably. This wine requires a longer time to mature than any of the others, nine months being the period usually allotted to the manufacture of a batch of champagne. It is the only wine on Mr. Ambrecht's list which is not entirely prepared at Duke Street, as for obvious reasons





VIEW OF WINE CELLAR.



ARMBRECHT'S PHARMACY.

the coca preparation must be added on the spot. Hence Mr. Armbrecht supplies his agent at Rheims with coca extract, which is added to the champagne when it is liqueured. The extract is added to the brandy and sugar of which the liqueur is composed, and the whole injected into the bottle by a machine which simultaneously corks the champagne.

Asked whether the recent advance in the price of glass bottles had not put him to a sensible loss, Mr. Armbrecht replied that, thus far, such had not been the case. He made his contracts for bottles for a considerable time in advance, buying 1,000 gross at a time. The coca-wine bottles are manufactured at Neusattel-Elbogen, in Bohemia, by a brother of Mr. Siemens, the celebrated electrician. They are shipped from the works down the Elbe, packed loose in vessel in Hamburg, and taken to Messrs. Siemens' warehouse at Poplar, where they are washed. One thousand gross, Mr. Armbrecht told us, last him, at the present rate of sale of his wine, for eight or nine months; and from these data the total annual "output" of Armbrecht's coca wine may be readily calculated according to Cocker by the aspiring arithmetician. Messrs. Siemens undertook not to raise the price for his last contract provided he would allow them to execute it in the winter, when work is slack and labour less pretentious. Mr. Armbrecht, in his present close quarters, is put to a considerable trouble in handling the big 115-gallon pipes in which he receives a great part of his wine. These unwieldy casks, however, possess the advantage, in the first place, of being comparatively cheaper than the hogsheads; and, secondly, of yielding a

better wine owing to the diminished area of contact of the liquid with the wood. A man and a boy, in the course of a ten-hours working-day, bottle, cork, and pack into bins 4 hogsheads, or about 1,300 bottles, of wine between them. In ordinary seasons a stock of 50 hogsheads of prepared wine is generally kept, but during the spring and autumn months, when the sales are largest, it is often found impossible to keep so large a reserve. Burgundy and Malaga wine are left to mature for a much longer period than the "medium" grade, and Mr. Armbrecht showed us one cellar stowed with the former varieties, which have been bottled since the month of November.

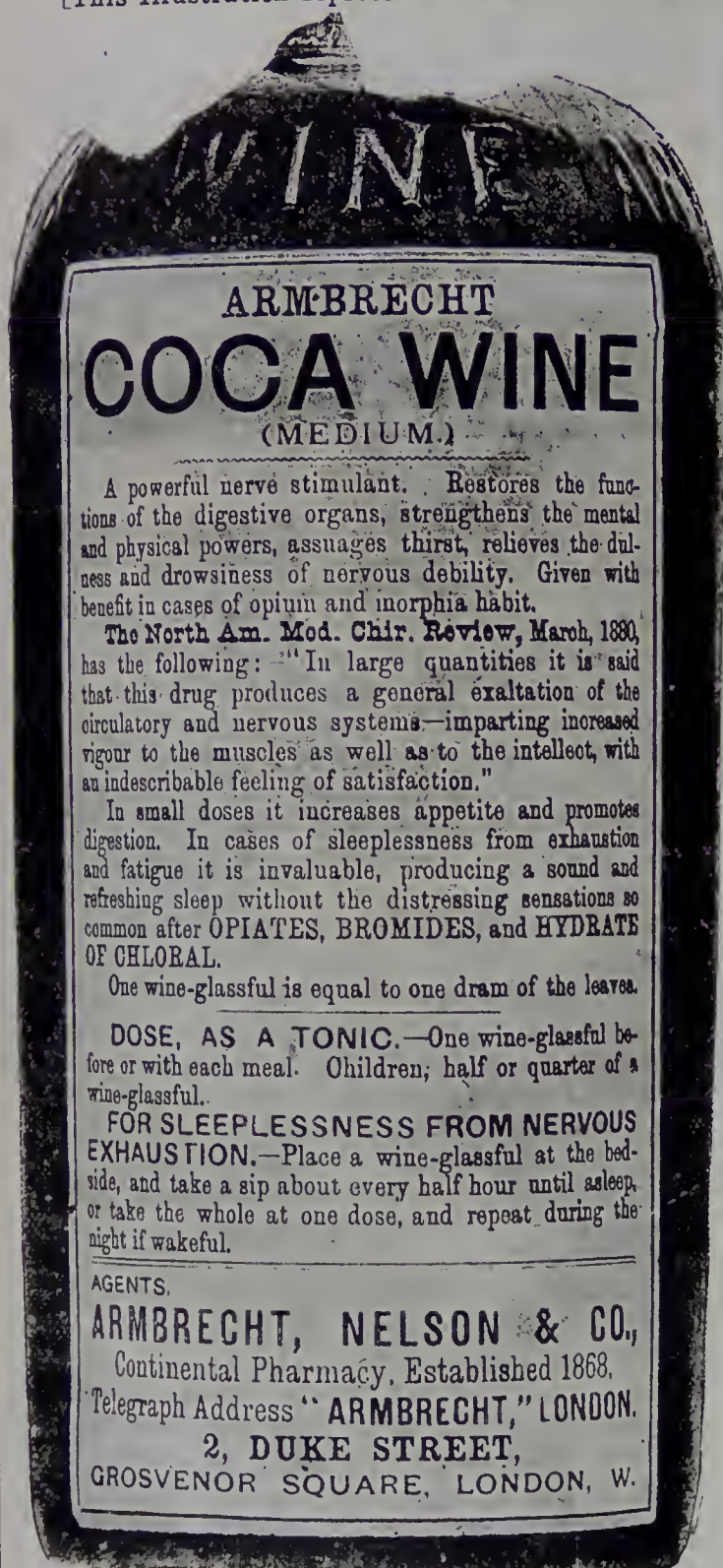
Asked where his principal trade lay, we were told by Mr. Armbrecht that he has some very good customers among pharmacists, though most of them buy through the intermediary of wholesale houses; but certain inducements are offered to chemists who buy straight from him. He does not supply the Stores directly. With his export business he is well satisfied. The week before our representative called some very satisfactory orders had been received from British India and Australia, and in Canada and the States the wine was beginning to make its way to some extent, partly in consequence of its introduction on board of the Cunard liners. Mr. Armbrecht commenced business as a pharmacist in Ryder Street, St. James's, in 1862, thence he removed to No. 23, and afterwards to his present quarters at 2 Duke Street, Grosvenor Square. No. 5 Duke Street, now in course of erection, is to be the future home of the coca wine and its enterprising originator.

NOTE BY G. T. A.—To-day, April 15th, the stock mentioned above, as seen by the town traveller, has all been bottled and packed, and mostly disposed of. Our stock this day is 15 pipes each 115 gallons and 30 hogsheads each 58 gallons, which will be ready for bottling in about three weeks' time, and will furnish a further stock of 3,450 gallons. Each gallon gives us eight pint-bottles of 20 ounces—in all 27,600 bottles—a stock which will carry us over June.



# ARMBRECHT COCA WINE.

[This Illustration represents the EXACT SIZE of the 4s. 6d. Bottle.]



4s. 6d. a Bottle.



48s. per Dozen.

"Several preparations of Coca Wine have been placed before the public, but we unhesitatingly accord to the above the first place. Their Coca Wine is more suited to the English palate than some of the continental preparations, which are too sweet to be palatable, and which destroy their otherwise tonic and invigorating qualities by deranging the digestive system or creating nausea. The value of Coca Wine in conditions of debility is too well recognised to require comment, and we need do no more than say that, after a very careful trial of Messrs. ARMBRECHT, NELSON & Co.'s Wine, we can speak most highly of it as a sound and invigorating tonic, and can recommend it most unhesitatingly."—*Journal of Laryngology and Rhinology.*

For Order List, see Page 59 (bottom folio).

Handbills, Show Cards, &c., Free on Application.

## ARMBRECHT, NELSON & CO.

2, 3, & 4 DUKE STREET, GROSVENOR SQUARE, LONDON.



RETAIL PRICES.COCA WINE  
(ARMBRECHT).

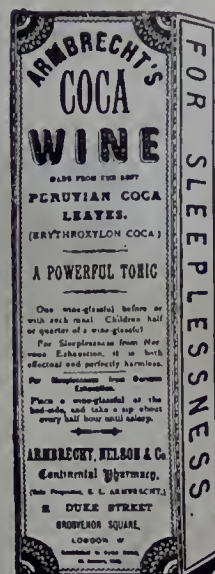
## ORDER SHEET.

18

Gentlemen,

Please to send immediately on  
receipt of this, by \_\_\_\_\_

FOR FATIGUE OF

MIND AND BODY.  
FOR SLEEPLESSNESS.

	Wholesale.			Retail Price.	£	s.	d.
Doz. Coca Medium	...	36/	...	Imperial Pints ... 48/ doz.			
" Coca Burgundy	...	36/	...	" ... 48/ "			
" Coca Malaga	...	36/	...	" ... 48/ "			
" Coca Port	...	36/	...	" ... 48/ "			
" Coca Sherry	...	36/	...	" ... 48/ "			
" Coca Champagne	...	46/6	...	Quarts ... 56/ "			
" "	...	26/6	...	Pints ... 33/ "			
" Coca Wine Extract	...	31/6	...	Bottles ... 42/ "			
" "	...	49/6	...	" ... 66/ "			
" Coca Lozenges	...	13/6	...	Box ... 18/ "			
" "	...	22/6	...	Tin ... 30/ "			
" Pamphlets for Distribution—No Charge.							

£

To \_\_\_\_\_

Address \_\_\_\_\_

SPECIAL PRICE ON GROSS LOTS.

Messrs. ARMBRECHT, NELSON &amp; CO.,

2 Duke Street, Grosvenor Square, London, W.

If order be sent to us direct and remittance enclosed, we offer a discount of  $2\frac{1}{2}$  per cent. single dozen (not less) and 5 per cent. on 3 dozen lots; carriage paid England and Wales, and half Scotland and Ireland.



# BURROUGHS, WELLCOME & CO.

## LIBRARY

### No. DYSPEPSIA.

"DAILY EXPRESS," DUBLIN, January 7th, 1890.



4 6 a bottle; 48— per doz.

ORDER SHEET, see page 59  
(bottom folio).

SIR,—In answer to your correspondent "Dyspepsia's" letter in your issue of the 31st December, under the heading "A Plea for Luncheon," I would recommend him and his fellow-sufferers to provide themselves with a bottle of Messrs. Armbrecht, Nelson, & Co.'s coca wine, keep it in their desks, and take a half or a whole wineglass of it in the middle of the day with their "few slices of bread and butter." They will find that a small amount of this very pleasant and invaluable preparation will remove the sense of fatigue, satisfy the craving for food, and assuage thirst. For those bank officials and city clerks who are total abstainers, and might object to the use of wine, even as a medicine, Messrs. Armbrecht prepare coca extract and coca lozenges. They are all prepared from the leaves of erythroxylon coca, a small shrub which grows in South America, and has been known and appreciated by the natives of that country from the earliest times. The Indians will pass the whole day working or travelling, sustained solely by coca, but eating freely in the evening. The natives working in the mines derive such sustenance from chewing these leaves that they frequently take no food for four or five days, though constantly working, and with a good supply of coca they feel neither hunger, thirst, nor fatigue; and without inconvenience or injury they could remain eight or ten days without sleep.

Mr. Markham, in his "Peruvian Barks," says: "I chewed coca, not constantly, but very frequently, and, besides the agreeable, soothing feeling it produced, I found I could endure long abstinence from food with less inconvenience than I should otherwise have felt; and it enabled me to ascend precipitous mountain sides with a feeling of lightness and elasticity, and without losing breath."

I will not trespass further on your valuable space, but will content myself by saying that the sample bottle Messrs. Armbrecht were kind enough to send me I gave to my wife, who was suffering from nervous debility, exhaustion, and insomnia, the result of a painful complication of diseases, necessitating her remaining in bed over two months. In her case, the only one I have had an opportunity of trying it in, it acted as a charm, strengthening, soothing, and producing a feeling of complete restfulness, and inducing sound and refreshing sleep. Messrs. Armbrecht, Nelson, & Co.'s address is 2 Duke Street, Grosvenor Square, London, W. They supply clergymen and medical men with samples free, and pay postage on bottles ordered. The price for a large bottle is 5s. Their Agents in Armagh are W. Couser, 4 English Street.—Lonth: Lucas and Wal-kington. Trusting these remarks may prove of use to "Dyspepsia," *et hoc genus omne*,

I am, Sir, yours faithfully,  
L.R.C.S.I., M.K.Q.C.P.I., &c.

15 Ness Bank, Inverness, N.B.  
January 3rd, 1890.

## MESSRS. ARMBRECHT, NELSON & CO.

2, 3, 4 Duke St., Grosvenor Square, London.

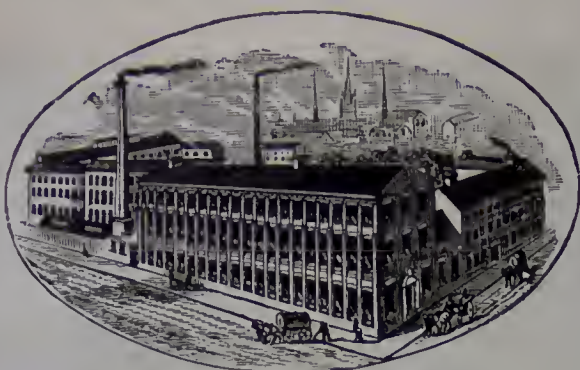


## THE FUTURE HOME OF COCA WINE (ARMBRECHT).



Nos. 5 & 6 DUKE STREET, GROSVENOR SQUARE (in progress of building), to which the business will be removed in the early part of 1892.





LABORATORIES AND DRUG MILLS COVENTRY.



BIRMINGHAM BRANCH HOUSE.

# WYLEYS & CO.

MANUFACTURING CHEMISTS,  
Wholesale Druggists,  
AND  
DRUG GRINDERS.

WAREHOUSES, LABORATORIES, AND DRUG MILLS,  
**COVENTRY.**

BRANCH HOUSE,  
**52 MOOR STREET, BIRMINGHAM.**

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Monthly "PRICES CURRENT" post free on application.



# **WYLEYS & CO.** MANUFACTURING CHEMISTS.

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Standardized Preparations of the British Pharmacopœia.

Extracts—Solid and Liquid, Brit. Pharm.

Sp. Æther. Nit. P.B. (Maximum amount of Nitrous Ether.)

Sp. Ammon. Aromat. P.B.

Tinctures, Brit. Pharm.

Plaisters Brit. Pharm., in Rolls.

Syrups, Brit. Pharm.

Syr. Ferri Phosph. Co., and other Chemical Syrups.

Granular Effervescent Preparations--Brit. Pharm.

Granular and Fruit Citrates.

Distilled and Concentrated Waters.

Concentrated Decoctions and Infusions.

Gelatine Coated Oval Pills.

Pearl Coated Pills.

Pessaries, Suppositories, and Bougies.

Patent Duraplastic Horse Balls.

Compressed Pellets.

Disintegrating Pellets.

Finely Powdered Drugs (own Grinding).

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ALL PREPARATIONS SOLD UNDER GUARANTEE AS TO STRENGTH AND PURITY.



CRESCENT



BRAND

# BICARBONATE OF SODA,

REFINED AND RECRYSTALLIZED.

PURE AND CHEAP:

## ANALYSIS.

Bicarbonate of Soda	...	...	...	...	97.20
Mono Carbonate of Soda	...	...	...	...	1.90
Sulphate of Soda	...	...	...	...	trace
Chloride of Sodium	...	...	...	...	.035
Moisture	...	...	...	...	.82
Insoluble	...	...	...	...	nil

# PURE ALKALI,

GUARANTEED 58 DEGREES,

EQUAL TO 98 PER CENT. OF CARBONATE OF SODA.

Most economical form of Soda for the use of Printers,  
Bleachers, Dyers; Glass, Paper, and Soap Makers.

# SODA CRYSTALS


OF THE FINEST QUALITY.

# BRUNNER, MOND & CO., LIM.

*Manufacturers of Soda by the Ammonia Process  
(Solvay's & Mond's Patents),*

NORTHWICH, CHESHIRE.





# "LOYD'S LEICESTER"

**FOR PURITY,  
PERMANENCE, AND  
SOLUBILITY**

**THESE PILLS CANNOT BE SURPASSED.**

## SOLUBLE PEARL COATED PILLS

Special Quotations for Large Quantities.

**RETAIL CHEMISTS OFFERED SPECIAL ADVANTAGES FOR CASH.**

Private Formulæ carefully prepared. A Complete List forwarded upon application.

Mr. T. HOWARD LLOYD (18 years partner in the firm of John Richardson & Co., Leicester) begs to inform the Trade that he is now carrying on business at the following address.

Having for many years devoted much attention to the perfecting of the Soluble Pearl Coating for Pills, he will personally supervise this branch of the business, and, having procured a complete plant of entirely new machinery, with the latest improvements, is in a position to produce the same in the highest state of perfection.

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Wholesale Druggists & Manufacturing Chemists,  
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*Embracing the Therapeutic Properties of the COCA Plant, blended with the best Madeira.*

## COCA FOR TROUBLESOME THROATS.

Testimony is not wanting from specialists in diseases of the throat, and dramatic and lyric artists, to show that Coca has a wonderfully invigorating effect upon the voice. The preparation in most common use is the Wine of Coca, which, in order to yield the characteristic effect, must be made "*upon honour*." To be of any decided value it must be made from the Coca leaves. Very much of the Coca Wine on the market is merely a solution of Cocaine, which cannot be too severely condemned. Hence, those with troublesome throats who desire to use this tonic should be exceedingly careful in purchasing, patronising dealers only of known reliability.

The VINACOCA is carefully prepared from the best Coca Leaf only. (No addition of Cocaine.)

**ONLY** ONE WINE (CHOICE MADEIRA)  
ONE QUALITY (A1)  
ONE PRICE } **THE BEST & CHEAPEST ON THE MARKET.**

VINACOCA is a direct stimulant of the most active kind, supporting life in a manner almost miraculous, without disturbance of the vital functions. For the voice, a wineglassful before any ordeal is sufficient. Its effect upon the vocal cords is surprising, and of great value to Public Speakers, Professional and other Singers, and Lecturers.

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Pamphlets for distribution, carriage paid.

COCA is prepared in various forms: COCA LOZENGES, COCA TABLETS, COCA ELIXIR, COCA TEA, COCA CHOCOLATE, STAMIN (Coca and Beef Extract), COCA TOBACCO, &c.

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London International and Universal Exhibition, 1884, Gold Medal Awarded for our Pharmaceutical Preparations.  
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THE ORIGINAL PREPARATION.

Price (in England) 10s. 6d. per pound, packed (for Dispensing only) in 10-oz., 22-oz., 40-oz., and 90-oz. Bottles.

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C. J. HEWLETT & SON, MANUFACTURING CHEMISTS, LONDON, E.C.  
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*Physicians will oblige, when ordering Liq. Santal Flav. cum Buchu et Cubeba, by writing "Liquor Santal Flav. c. Buchu et Cubeba (Hewlett's)."*

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# HEWLETT'S MIST. PEPSINÆ CO. C. BISMUTHO.

Highly recommended in various forms of dyspepsia, having a direct action upon the mucous membrane of the stomach and intestines as a sedative. It can be administered with marked and almost instantaneous effect in the irritative form of dyspepsia more especially when *pyrosis* is a conspicuous symptom, and pain occurs an hour or more after food. In simple neuralgic gastric pain following eating, occurring in feeble subjects, it is especially indicated, and even in *carcinoma* it has been used with great success in alleviating pain and vomiting.

In the dyspepsia of patients dependent upon some organic disease, and where there is a decided loss of nerve power, it is of singular service. Thus, for instance, a person after a meal complains of a peculiar gnawing and emptiness, with slight pain at the epigastrium, evident signs of general relaxation and loss of nerve power, clinical experience has shown that it is of great service as a tonic and stomachic. A portion of its value arises, it may be, from its action upon the spinal motor nerve centres. Be these things as they may, experience has abundantly demonstrated the value of the compound as a stomachic, anti-dyspeptic, and tonic, in general functional atony and relaxation, and in the various forms of dyspepsia, constipation, or diarrhoea, connected with atony of the visceral muscular coat, the Mist. Pepsinæ Co. c. Bismutho is a very valuable remedy. In the *exhausting purging of Phthisis*, accompanied with night sweats and restlessness, Dr. MATHEWS, of Nantwich, has used it with marked and appreciable effect.

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Physicians will oblige, when ordering Mist. Pepsinæ Co. c. Bismutho, by writing Mist. Pepsinæ Co. (Hewlett's).

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"This combination of Messrs. HEWLETT is one which has been extensively tested, and with good results. It is justly popular in the profession as a very valuable and effective combination. It serves not only to improve *apepsia*, but to lessen the gastric pain and to facilitate difficult and painful digestion, without setting up any evils of its own. It is a very good crutch for persons of weak stomach to lean on."—January 15th, 1881.

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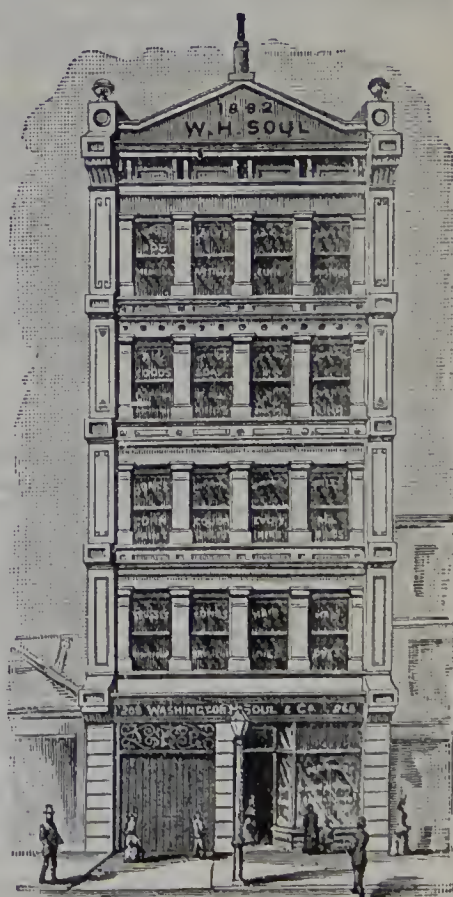
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Our Extra Steam Refined Oil is trehly distilled and twice rectified by steam, by an entirely new process and in apparatus of our own invention, by which all these polymeric products

Our Extra Steam Refined quality is in firm, hard, dry, and snowy-white crystals, entirely free from oily contamination, and therefore of the highest melting point. As the original and largest manufacturers in the world of the true Japan Menthol, we guarantee our brand to be absolutely pure. Beware of substitutes. For full particulars, therapeutic uses, etc., see special circulars, to be had on application.

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of a tarry and resinous nature which are objected to by some consumers are extracted. It is of water-white colour, retaining its full aroma, pungency, and strength, and guaranteed absolutely pure and soluble in spirits of wine.

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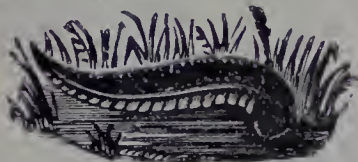
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So-called Concentrations are in the market, called by the same name as  
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They are not made from the crude material, but by dissolving the  
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Have the Largest Sale of any Medicine in the World.

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1s. 1½d. box,  
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**SPECIAL OFFER.**—Handsome Bronzed Counter Stand, packed in box, completely fitted as above, at 5s. net. Contents sell at 8s. 10½d., being advertised and really good, they sell quickly: this attractive Stand will quadruple sales.

**LIMITS.**—On account of cost, only one or two can be supplied to one Druggist, and orders are executed in turn.

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Please send me one (or two) Bronzed Counter Stands, fitted with Cascara-Hawley, &c., at 5s. each. (To be taken back at 7s. in a year's time, if none of contents sold.)

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**ACETONE CHLOROFORM IS NOT "WARRINGTON" CHLOROFORM,**

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Sole Manufacturers, **WARRINGTON CHEMICAL CO.**, Warrington, Lancashire, & 46 Jewin St., London, E.C.  
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In **COUGHS, ASTHMA, BRONCHITIS, INFLUENZA**, &c., its effects are truly wonderful, immediately relieving the tightness of the Chest, allaying irritation of the throat, promoting Expectoration, and speedily and effectually subduing the Cough.

It soothes the weary aching of **CONSUMPTION**, relieves the harassing Cough, and often prevents those sleepless nights so trying to the sufferer.

In **CHOLERA, DIARRHŒA, DYSENTERY**, &c., it has proved itself a most valuable specific, quickly relieving the pain and spasms, and seldom failing to check the disease; for which property, as well as for its value in Sea Sickness (for which it is the best remedy known), it should be an indispensable article in every emigrant's outfit.

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"Peculiarly serviceable in Bronchial, Spasmodic, and Neuralgic Affections."  
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"I have used it largely in Spasmodic and Painful Affections, Bronchitis, and Neuralgia. It has the property of being readily combinable in ordinary prescriptions—an advantage over all similar preparations."

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A Surgeon writes:—"In Diarrhœa, Colic, Ague, Spasms, I have found it relieve more pain and cause more joy than any other article that can be named. Has proved itself a specific against sea-sickness."

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"I am pleased to say that although I have not finished a quarter of the bottle (2s. 9d.) the pain has left my chest, and the cough is almost well."—J. BROWN.

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**TIC,**  
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Ditto	.. .. .	2 9	1 3 0	
Ditto (3 fluid oz.)	.. .. .	4 6	1 16 0	
Ditto (8 " )	.. .. .	11 0	4 13 0	
Liq. Chlorodyni (Original and only Genuine)	½ lb. 2/6 each			For dispensing purposes.
Ditto ditto	¼ lb. 4/6 "			
Ditto ditto	1 lb. 8- "			
Winchester Quarts (6 lb.)	7/6 per lb., bottles free.			
Towle's Antibilious Pills	.. .. .	1 1½	0 8 8	
Ditto	.. .. .	2 9	1 3 3	
Towle's Chlorodyne Lozenges	.. .. .	10 7½	0 5 6	
Ditto Jujubes	.. .. .	1 1½	0 8 0	
Ditto	in bulk, bottles free, containing 1 lb., 2/9 each.			
Ditto ditto	1 lb. 10 oz., 4/6 "			
Ditto ditto	4 lb., 10/- "			
N.B.—The Commissioners will allow them to be sold by the retailers without further duty, provided they are simply wrapped in paper, and not enclosed in a box, bottle, or packet.				
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Ditto	.. .. .	1 6	0 14 0	
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£5 worth (assorted or otherwise) Carriage Paid.  
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Manufacturers of all Pharmaceutical Preparations on the best and most improved principles. Quotations on Application.

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## THE SAFEST AND BEST PREPARATION OF OPIUM.

PRODUCES NEITHER HEADACHE, SICKNESS, NOR CONSTIPATION.

PREPARED EXCLUSIVELY FROM OPIUM.

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**PAPAIN**  
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Acts in Acid, Alkaline, and Neutral Solution.

A new and most efficient Analgesic in cases of  
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Facial and Dental Neuralgia, Sciatica, Lumbago, &c.

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(DURAND, HUGUENIN & CO.)  
For treatment of Rheumatism, Dysentery, Cholera, Ulcers, Skin Diseases, &c.

All the more important Salts of  
**QUININE**  
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Cinchonidine, Cinchonine, Quinidine, &c., kept in stock.

Obtainable through the Wholesale Druggists throughout Great Britain and Ireland, and of

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UNG. EMOLLIENS is prepared expressly for the Medical Profession, and will be found to far surpass in therapeutic value any previous preparation of the kind brought to their notice.

## UNG. EMOLLIENS ANTISEPTICUM (Elton & Co.)

Prepared by the same special process of manipulation as the UNG. EMOLLIENS, but medicated by combination with a new and specially prepared basic and antiseptic Salt of Zinc and other approved remedies.

The following skin diseases may be mentioned, in which it has proved a most valuable and certain remedy:—Pruritus Ani, Eczema, Acne Rosacea, Erythema, Herpes, Impetigo, Scabies, Scurvy, Erysipelas, Urticaria, Psoriasis, Tinea-Versicolor, or any other irritation of the epidermal surface.

It is perfectly miscible with all fats, oils, and waters, and may be dispensed with any other medicament the physician desires to use in addition to its present constituents.

Prepared only by the Proprietors, Messrs. ELTON & Co., 28 Endsleigh Gardens, N.W.

*Sole Wholesale Agents:—*

H. GILBERTSON & SONS, 11 St. Andrew's St., London, E.C.

## PURE TARTAR EMETIC.

## PURE OXIDE OF ANTIMONY.

Showing 98 per cent. of anhydrous  $Sb_2O_3$ .

This product is obtained BY A NEW PROCESS, and is offered at VERY ADVANTAGEOUS PRICES.

## POULENC FRÈRES,

92 Rue Vieille du Temple, PARIS.

Grand Prize, Universal Exhibition, Paris, 1889.

NOW BEING LARGELY PRE-  
SCRIBED BY THE MEDICAL  
PROFESSION.  
OBTAINABLE DIRECT FROM  
CONSIGNEES OR WHOLESALE  
HOUSES.

## PEPSINUM

## CONC.

## "LANGEBEK."

ONE PART OF THIS  
PEPSIN DISSOLVES  
635 PARTS FIBRIN.

Sole Consignees for the United  
Kingdom,

G. J. R. PARKES & CO.

196 BELSIZE ROAD,

KILBURN, N.W.

And 28 CIRCUS ROAD,

ST. JOHN'S WOOD, N.W.

WRITE FOR PAMPHLET.

ESTABLISHED 1813.

# CLAY, DOD & COMPANY,

WHOLESALE AND EXPORT DRUGGISTS,

52 ST. ANNE STREET, LIVERPOOL.

Address for Telegrams—"CLAY LIVERPOOL."

Telephone No. 1192.

Mills and Laboratories—WAKEFIELD STREET.

IMPORTERS OF ESSENTIAL OILS, OLIVE OILS, CASTOR OIL.  
FINEST NORWEGIAN COD LIVER OIL.

Manufacturers of all descriptions of

PHARMACEUTICAL PREPARATIONS, COATED TASTELESS PILLS.

Powders ground in own mills. Purity guaranteed.

Samples free on application. Special Quotation to Cash or Large Buyers. Monthly Priced List forwarded on receipt of business card.

BITUMINOL, OR VASELINE SUBSTITUTE.



# TO WHOLESALE DRUGGISTS, &c.

Buyers of the following are invited to send for Samples and Prices before placing their Orders elsewhere. They will find it to their **ADVANTAGE** to do so.

**BENZINE.** In 6d. and 1s. bottles.

**CEMENT.** To retail 1d. and 3d.

**CASTOR OIL** (Crystal, Tasteless). In bulk, or packed in bottles from  $\frac{1}{2}$  oz. to 1 lb.

**COD LIVER OIL.** In casks, or packed in 6d. and 1s. bottles.

**CORN SOLVENT.** To retail 1d. and 3d.

**FEEDING BOTTLES.** All kinds.

**FLY PAPERS.**

**FULLER'S EARTH** (Powdered). In bulk or in packets.

**GLYCERINE.** In bulk or packed in bottles, from  $\frac{1}{2}$  oz. to 1 lb.

**COLZALINE** (or Golden Oil). Our Speciality.

**HAIR OIL.** In bulk, or packed in bottles, from  $\frac{1}{2}$  oz. to 1 lb.

**INSECT POWDER.** In bulk, or packed in 1d., 2d., 3d., and 6d. boxes.

**LIME CREAM.** In 6d. and 1s. bottles.

**MENTHOL CONES.** Extra Powerful Brand. To retail 1d., 2d., 3d., 4d., and 6d.

**MACHINE OIL.** In bulk, or in 1d., 2d., and 6d. bottles.

**POMADES.** All kinds, to retail from 1d. upwards.

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**SEIDLITZ POWDERS.** In boxes.

**TOOTHACHE TINCTURE.** In 1d. and 3d. bottles.

**VASELINE SUBSTITUTE.**

In these days of competition, buyers should seek the best markets. We confidently state that no other firm offers the advantages that we do.

WRITE FOR SAMPLES AND PRICES.

W. & H. JACKSON, 14 MANESTY LANE, LIVERPOOL.

## MAGNESIA

FOR PHARMACEUTICAL AND MANUFACTURING PURPOSES

CARBONATE, in BLOCK, POWDER, or WEIGHED BLOCKS.

**CALCINED & PURE HYDRATE OF MAGNESIA.**

**PURE FLUID MAGNESIA.**

ONE OF THE BEST BRANDS MADE.

*For Prices and Particulars apply to*

THE WASHINGTON CHEMICAL CO., WASHINGTON, COUNTY DURHAM, ENGLAND.

## DRIED MOSS Compressed into Sheets

Syn.—Sphagnum or Turf Moss (Beckstroem's).

On account of its great capability of sucking up or imbibing liquids, this forms a useful dressing for absorbing the Discharge from open Wounds, and especially Urinary Discharge in Bladder, Kidney and Dropsical Affections. It is Antiputrescent, and may be made thoroughly Antiseptic by being sprayed with Sublimate Solution before use. The pressed sheets will absorb eight times their weight of water, and when disintegrated may be formed into Elastic Pillows or Pads by enclosure in Muslin Bags.



London Agent—WILLIAM MARTINDALE,  
PHARMACEUTICAL CHEMIST,  
10 NEW CAVENDISH STREET, LONDON, W.



# BISHOP'S

## GRANULAR EFFERVESCENT PREPARATIONS.

"ALFRED BISHOP" was the Inventor and Original Manufacturer of all Granular Effervescent Preparations.  
All others are imitations.

SILVER MEDAL, PARIS EXHIBITION, 1889.

HIGHEST AWARD FOR GRANULAR PREPARATIONS.

Citrate of Caffeine ...	1, 3, 5, and 10 grs. in 1 dr.	Sodium Bromide ...	... 10 grs. in 1 dr.
Citrate of Lithia ...	... 5 do.	Phenacetin ...	... 5 and 10 do.
Citrate of Potash ...	... 10 do.	Caffeine Hydrobromate ...	... 1, 3, and 5 do.
<b>ANTIPYRIN</b> ...	5 and 10 do.	Iron and Arsenic ...	4 grs. and 3 mns. in 1 dr.
Lithia Benzoate ...	... 5 do.	Exalgine ...	... 1 and 2 grs. in 1 dr.
Nux Vomica ...	... $\frac{1}{12}$ do.	Lithia Salicylate ...	... 5 do.
Iron Carb. (Formula Blaud) ...	... 2 do.	Soda Salicylate ...	... 5 and 10 do.
		Soda Sulphate ...	... 10 do.

MAGNESIA CITRATE (the Original).

We are now making a Second Quality Citrate of Magnesia at 1s. 3d. per lb. less 10 per cent., sold only in bulk, smallest quantity 4½ lbs. Special Discounts for larger quantities. We guarantee this to be a thoroughly sound and reliable article.



AND ALL OTHER GRANULAR EFFERVESCENT PREPARATIONS.

List free on application.

None genuine without this Trade Mark.



**ALFRED BISHOP & SONS,**

MANUFACTURING CHEMISTS, "Speck's Fields," 48 Spelman Street, LONDON, Eng.

ESTABLISHED  
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## HENRY'S CALCINED MAGNESIA

Continues to be prepared with scrupulous care in the greatest chemical purity, by

Messrs. THOMAS & WILLIAM HENRY, 11 East Street, St. Peter's, Manchester

And is sold in bottles, authenticated by a Government Stamp bearing their Names. Trade Mark, "Henry's Calcined Magnesia."

Price 4s. 6d., or 2s. 9d.

NEW YORK—MESSRS. W. H. SCHIEFFELIN & Co., William Street. PARIS—MESSRS. ROBERTS & Co., 5 Rue de la Paix

### The "Chemist and Druggist" Series

Which all Chemists ought to have and to read as faithfully as their British Pharmacopœia, viz.,

ALPHE'S

"HANDY BOOK OF MEDICINE STAMP DUTY"

(Price 2/6, by post 2/9), and

"THE ART OF DISPENSING"

(Price 3/6, by post 3/10).

MANUAL OF PHARMACEUTICAL TESTING

(B. S. PROCTOR, F.I.C. Price 2/6, by post 2/9).

**NOW READY,  
VETERINARY COUNTER PRACTICE,**

Price 3s. 6d. Post Free, 3s. 9d.

Published at the Offices of "The Chemist and Druggist,"  
LONDON AND MELBOURNE.

May be obtained from most Wholesale Houses, who invoice the Books at the published prices.

### ARTIFICIAL HUMAN EYES FROM GLASS.

Excellent Quality. £6 per 100.



Plain Clinical Thermometers, in wood cases, 10/ per doz. Clinical Thermometers, with imperishable index, in massive tubes, about 4½ inches, in boxwood cases, 16/ per doz.; in nickel, 18/ per doz. Clinical Thermometers, several kinds. Glass Syringes in all kinds and sizes, at wholesale prices. Homœopathic Medicine Glasses of all kinds.

REFERENCES REQUIRED.

OSCAR BOCK, Kiel (Germany), Manufacturer of all kinds of Instruments from Glass.

### SQUIRE KNIGHT'S EYE OINTMENT.

**THE**

**SURVIVAL**

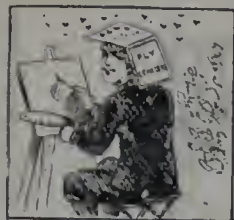
**OF THE**

**FITTEST.**

One of the oldest Eye Ointments in the market. Secured and held a splendid sale without advertising. The present proprietor, W. H. Richardson, F.C.S., Chemist, Dudley, desires to advise Chemists that Squire Knight's Eye Ointment is being extensively advertised. As an increased and extending trade is sure to result Chemists would do well to stock it. At all Wholesale Houses.

Correspondence to the Head Depot at Dudley will always receive prompt attention.

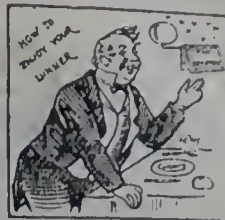




BY ROYAL LETTERS PATENT.

THE  
**'FLY CEMETERY'**

TRADE MARK REGISTERED.



WE again beg respectfully to call the attention of the Trade to our well-known Non-poisonous Fly Paper, the "Fly Cemetery," the title of which has become a familiar household word. The enormous annual increase in the output is the best proof of its popularity. Last year, in spite of a cold season and a host of worthless imitations (of the skating rink order), we again had an increase of over a million and a half papers above that of 1889. The whole of our parchment paper (upon which the "Honey Fly Gum" is spread) has been specially manufactured for us, so that we are enabled to guarantee its excellent quality, and in order to meet the anticipated further demands for the coming season, we have laid down several new patent machines. The efficacy of the "Fly Cemetery" has been testified to in a remarkable manner by the retail trade, but this year we have received a collection of splendid

### Testimonials from nearly the Whole of the Leading Wholesale Houses

dealing in proprietary goods; such a consensus of opinion has never before been published. Samples and Testimonials free on application from the Patentees,

**TUNBRIDGE & WRIGHT, FLY PAPER MANUFACTURERS, READING.**

### CAUTION.

WE beg to warn you against Fraudulent Imitations, as our rights are protected by Patents, and persons offering such imitations for sale are liable to legal proceedings. During last season, 1890, we obtained two perpetual injunctions, the defendants paying damages and costs, and six others gave undertakings in similar terms to avoid proceedings.

Messrs. MANN & TAYLOR, 109 New Oxford Street, London, the solicitors for Messrs. TUNBRIDGE & WRIGHT, of READING, the Patentees and Sole Proprietors, have standing instructions to take immediate proceedings against all infringers.

# £1,000 REWARD.

## MITCHAM OILS OF PEPPERMINT.

Where to obtain them genuine, direct from the growers. Guaranteed pure as distilled from the herb, without any rectifying or any other mixing process.

The above reward will be paid to any person who shall prove that we have ever had any dealings, *direct or indirect*, in any Foreign Peppermint Oil, or in any other but **PURE MITCHAM BLACK AND WHITE**, of which we are the *largest* growers in *England*.

ESTABLISHED NEARLY 20 YEARS.

**THE WHOLESALE TRADE ONLY SUPPLIED.**

FOR SAMPLES AND PRICES ADDRESS—

**J. & G. MILLER,**

HERB GROWERS AND DISTILLERS OF ESSENTIAL OILS,  
BEDDINGTON CORNER, MITCHAM, SURREY.



# "AGREED AT LAST."

THE Statuette, as drawing below, is effectively produced in Terra Cotta, the likenesses of the two great political leaders being most striking, and their expression clearly shows they have at last found a topic on which no difference of opinion can exist, viz., that **"HOCKIN'S ACME CONES ARE THE BEST."**

We present this striking group, which is 18 inches high, with all first orders for £2 10s. worth of our

## "ACME" BRAND PURE MENTHOL CONES

(not more than £1 in value to be taken in 1d., 2d., and 3d. Cones.)

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### NEW PATTERNS. SPECIALLY SALEABLE.

No.

\*217F. Glass Show Bottle, with foot, as fig. 83, 1/8 per doz.

\*217A. Glass Show Bottle, with foot, as fig. 161, 3/- per doz.

\*214A. Glass Show Bottle, with foot, as fig. 161. This has a very large Cone. 4/3 per doz.

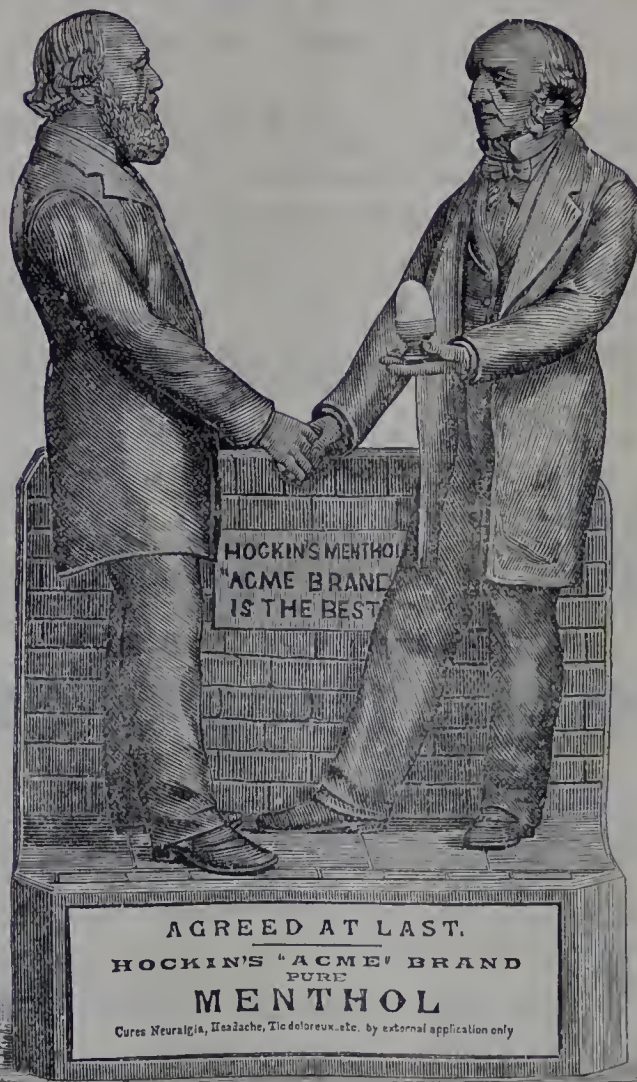
220. Cone Shape, as fig. 203, each in slide box, 1 doz. in Outer, extra size, 4/3 per doz.

\*221. Large Flat Draughtsman, very large Cone (120 grains), 4/9 per doz.

222. Elegantly cut Show Glass Bottles, as fig. 222, 3 cuttings, 9/- per doz.

224. Enamelled Tin Box, Printing on box, 30 gr. Cone, 1/6 per doz.

\* These are packed in 1-doz. Hanging Glass-fronted Boxes.



### 1d. CONES.

No.

219. Willow Boxes, bottle, barrel, or acorn shape, 3 doz. on card, one sort or assorted, 6/6 gross.

### 2d. CONES.

202s. Polished Willow Boxes, bullet shape, 2 doz. on card, 12/- gross.

201s. Polished Willow Boxes, barrel shape, 2 doz. on card, 12/- gross.

206s. Polished Willow Boxes, cone shape, 2 doz. on card, 12/- gross.

### 3d. CONES.

207s. Polished Willow Boxes, Draughtsman shape, 18/- gross.

### 4d. CONES.

88g. Polished Soft Wood, pedestal shape box, 80 grain cones, 1 doz. on card, 2/9 doz.

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We only quote the most saleable patterns here. Detail of all shapes on application

For Buyers who find 50/- worth too much, we shall be glad to send with an order for 25/- an OPAL GAS GLOBE, lettered as an Advertisement for Menthol, which makes a most striking and attractive addition to a Pharmacy.

## HOCKIN, WILSON & CO.

13 to 16 NEW INN YARD, 186a TOTTENHAM COURT ROAD, LONDON, W.

CATALOGUE OF SUNDRIES AND SPECIALITIES FORWARDED ON RECEIPT OF BUSINESS CARD.



# SHIRLEY'S A1 MENTHOL CONES & OTHER SPECIALITIES!

FIRST OF ALL, a few words on the question of "ORIGINALITY."

**WHO** has done the most to create the trade in **MENTHOL CONES**? Has not the **A1 BRAND** led the way? Therefore, as the Proprietor of the A1 Brand, I feel perfectly justified in supplying Cones in any shape or form in which they may be introduced, seeing that all Patterns I have myself put on the market have been studiously copied by others.

## BOXWOOD PATTERNS.

No.	8p.	6d. Acorn, on foot .....	3/3 doz.
103B.	4d.	Pedestal .....	2/6 "
113B.	6d.	Reversible .....	3/6 "
111.	1s.	Acorn, on foot .....	6/6 "
112.	6d.	Draughtsman .....	3/3 "
17F.	1s.	" .....	5/- "
9CR.	1s.	Reversible .....	4/6 "
*6.	6d.	Pedestal .....	3/6 "
*14L.	1s.	" .....	6/3 "
*17S.	6d.	Draughtsman .....	3/9 "
*17FP.	1s.	" .....	5/6 "

\* These Patterns have directions printed on the Boxwood.



No. 40.

## THE WATCH SHAPE,

Which is really a Draughtsman modified and made flatter. 3/3 doz.  
Special Prices to Wholesale Buyers.

The Charming China Figure JUSTICE given away with 40/- order assorted Cones.

## CHEAPER PATTERNS.

No.	110V.	1d.	Vase shape, 3 doz. on card ....	7/- gross.
110P.	1d.	Pedestal "	" " " " ....	7/- "
114.	2d.	Vase, varnished "	" " " " ....	14/- "
114P.	2d.	Pedestal "	" " " " ....	14/- "
115.	3d.	Flat shape "	2 doz. on card..	20/- "
109.	4d.	Willow Pedestal .....		2/6 doz.
117.	6d.	Large "		3/3 "
118.	6d.	Lighthouse shape .....		3/- "

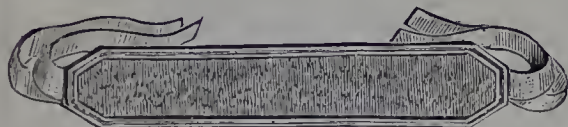


## NEW 15/- CASE.

Anyone ordering 15/- worth of Cones, assorted, other than 1d., is presented free with a most attractive folding Counter Case, with glass front.

HANDY AND PRETTY.

## NEW SEASON'S LOOFAH GOODS.



No. 112.	GLOVE, Loofah and Coloured Turco...	5/6 dozen.
" 116A.	" " " White Turco .....	4/6 "
" 116C.	" " " Coloured Canvas .....	4/6 "
" 130.	BELT " " " Turco .....	9/9 "
" 125.	" " " " larger.....	12/3 "
" 124.	" " " " Rough Turco .....	12/- "
" 129.	" " " Loofah both sides .....	9/6 "

BEFORE BUYING SMELLING BOTTLES, CHINA BOTTLES,  
TOILET BOTTLES, ODORATORS, &c.,  
CALL OR WRITE FOR PRICES AND SAMPLES.

A large quantity to select from.

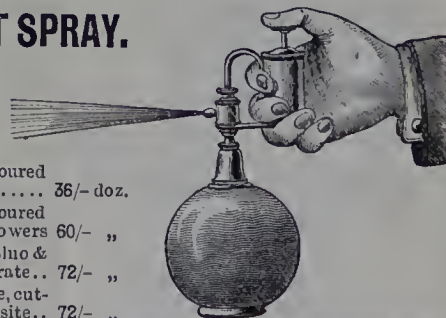
New Patterns constantly added.

## GOOD 1/- SPRAY.

No. 41.—Assorted Coloured Glass, ribbed, ball on top .....	8/6 doz.
" 42.—6d. Spray, assorted Colours .....	4/3 "
" 43.—6d. " " " ribbed .....	4/3 "
" 44.—9d. " " " " .....	6/- "

## NEW CORNET SPRAY.

Being the only one with Pump principle which can be held and worked with one hand.



No. 47.—Assorted Coloured Cracked Glass .....	36/- doz.
" 48.—Cream Coloured Opaque, with Flowers	60/- "
" 49.—Globe shape, Blue & Gold, very elaborate..	72/- "
" 50.—Diamond shape, cut-glass, most exquisite..	72/- "

## SPECIAL LINE.

No. 1.—Double Ball, Opaque Blue Glass, Pink and Gold Flowers, 28/- doz.

## TOOTH SOAP.—A1.

Splendid 6d. line on Easel Card.  
Sells at sight. 3/9 doz.

WHEN ORDERING SPECIFY  
A1 BRAND.

## CARBOLIC TOOTH POWDER.—A1.

Very attractively got up in Tin Boxes.

2-oz.	2/2 ..	6 doz.	1/11 doz.	12 doz.	1/9
1 "	3/- ..	"	2/9 "	"	2/6
1 1/2 "	3/6 ..	"	3/3 "	"	3/-
3 "	5/- ..	"	4/9 "	"	4/6

## SHAVING AI CREAM.

In Collapsible Tubes,  
attractively carded.  
4/- doz.

## AI BABY SOOTHERS.

4d.—Bone Ring, Polished Seamless Teat .....	2/4 doz.
6d.—Bone Ring, Polished Seamless Teat .....	3/6 doz.
	1 dozen on a Card.



## ETIENNE FRÈRES' PERFUMERY.

EXQUISITE PERFUMES, ATTRACTIVELY GOT UP.

6d., in Cut Stopped Bottles, tied with Silk Bow....	4/ doz.	*1s., in 1 oz. Cut Stopped Bottles, Lundborg shape	8/ doz.
6d., 1/2 oz. Round Essence, with Sprinkler .....	3/9 "	1s., in 2 oz. " " "	13/ "
6d., " " " corked and capped .....	3/6 "	1s., in 4 oz. " " "	24/ "

\* If 3 dozen of this series be ordered, Chemists' own name can be put in full.

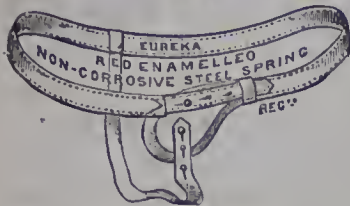
SAMPLE 1d. TUBES, 3 or 6 doz. on card, 8/ gross. 2d. TUBE, 2 doz. on card, 15/ gross.  
Perfume in Bulk, double ..... 7/ 20 oz. | Triple ..... | 10/ 20 oz. |

ARTHUR W. SHIRLEY, 55 FARRINGTON ROAD, LONDON, E.C.



# VINCENT WOOD'S INVENTIONS.

## TRUSSES.



Ask your  
Wholesale House  
for my

**SPECIALITY  
TRUSS,**  
and

take no substitute.

Quality 1, Moleskin and Basil Leather, Colours in Dove,  
Pink, and Buff.

Per dozen—Single, 11/6; Double, 18/6.

SIZES UP TO 40 INCHES. EVERY SPRING GUARANTEED.

## "EUREKA" GALVANO-ELECTRIC



**BATTERY  
BELTS,**

As Advertised.

Ladies' or Gents', 1 Power, 8 Batteries	.....	8 6 each.
" " 2 " 15 "	.....	12 6 "
" " 3 " 24 "	.....	16 6 "
" " SPINE BANDS	.....	30 doz.
As Sketch, Retail at 5 6 each.		

**LARGEST BONA - FIDE  
MANUFACTURER OF**

Trusses, Belts,  
Elastic Hosiery,  
Suspensory Bandages,  
Obstetric Binders,  
Chest Expanding Braces,  
Galvano-Electric and  
Magnetic Appliances, &c.

Chemists placing stock orders  
supplied free of charge with  
Terra-cotta Statuettes, Glass  
Show Cases, Show Cards,  
Electros, &c.

Obtainable from your Whole-  
sale Dealer, or, refusing to  
supply, communicate direct

**A SAVING OF 25 PER CENT. BY INSISTING UPON HAVING THE "EUREKA" GOODS.**

Inspect Goods here, and place orders with Wholesale Houses—3 St. Andrew St., Holborn Circus, London, E.C.

Established 51 years. Telegrams: "ACME LONDON." Telephone 6757.

Telegrams—  
"LINT LIVERPOOL."

# LINT.

MANUFACTURERS OF

THE  
**LIVERPOOL PATENT LINT CO.,**  
MARK ST. MILLS,  
NETHERFIELD ROAD NORTH,  
**LIVERPOOL.**



**FLAX, & COTTON,  
LINTS,**  
ABSORBENT, AND CARDED  
**COTTON WOOLS,**  
ABSORBENT, OPEN WHITE, and GREY  
**BANDAGES,**  
SURGEON'S, AND CARBOLIZED  
**TOW.**

# LINT.

## GANGEE TISSUE.

(PATENT ABSORBENT GAUZE AND  
COTTON WOOL.)

**ABSORBENT  
COTTON WOOL.**  
**ROLL BANDAGES.**

**ANTISEPTIC DRESSINGS.**

# ROBINSON & SONS,

COTTON SPINNERS AND MANUFACTURERS OF

**SURGEONS' LINTS, COTTON WOOLS.**  
**BANDAGES, & ANTISEPTIC DRESSINGS,**  
**WHEAT BRIDGE MILLS,**  
**NEAR CHESTERFIELD.**

Depot—55 Fann Street, Aldersgate Street, London.



**GOLD MEDAL AWARDED, EDINBURGH INTERNATIONAL EXHIBITION, 1890.**  
No BATH ROOM or CARRIAGE is fully Equipped without

Recommended  
by Medical Men.  
**RANKIN'S**  
**CORK MATS**  
REAL  
COMFORT

Warm, Soft, and Dry, Easily Washed, Clean, and Durable.

They Prevent Chills in Bathing, and keep the feet warm and comfortable.  
Mr. GLADSTONE pronounces them to be very useful, and Lord SALISBURY  
and many of the Nobility and Gentry now use and appreciate them. They prevent  
cold feet in Driving, in Church, in the Counting-house, in stone-floored Apart-  
ments. Numerous testimonials to their usefulness in a great variety of ways.  
Sizes: 1 ft. square to 20 x 45 in. Prices: 3/6, 7/6, and 10/6 each. Special Mats  
up to 21/ each. Of all leading Chemists and Furnishing Houses.

**CAUTION.**—Each Genuine Mat branded "Rankin's Cork Mat."

Wholesale terms on application to

**WM RANKIN & SONS** Cork Importers, GLASGOW & LISBON.



Wholesale Chemists' Agents: S. MAW, SON & THOMSON.



# BARCLAY & SONS, Ltd.



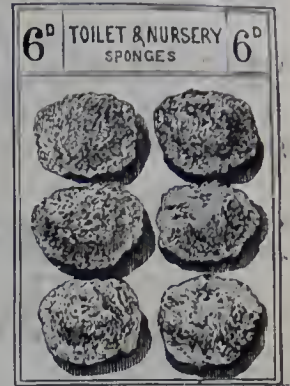
WE ARE STOCKING, AS LAST SEASON,  
**SPONGES ON CARDS**  
*At HALF the RETAIL PRICE.*

Will our London and Country Friends kindly NOTE?

1d. HONEYCOMB or TURKEY	.. ..	6d. per dozen.
2d. " "	.. ..	1/- "
3d. " "	.. ..	1 6 "
4d. " "	.. ..	2 - "
6d. " "	.. ..	3/- "
9d. " "	.. ..	4 6 "
1/- " "	.. ..	6 - "
1/6 " "	.. ..	9 - "

Also Sponges Unbleached, loose. 2d., 3d., 4d., 6d., 9d., 1/-, 1 6, 2/-, 3/-, 4/-, 5/-, 6/-, 7/6, and 10/- per piece, &c., &c.

**95 FARRINGDON STREET, LONDON.**



# FRANK WOOD

(From W. WOOD & SON, MANCHESTER),

**42 BELVOIR STREET, LEICESTER.**

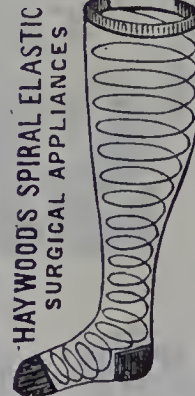
Trusses, Single...	... ..	12/6 per doz.	Elastic Stockings, Cotton	.. ..	2/2 each.
" Double	... ..	20/- "	" " Silk	.. ..	3/4 "
" Single Femoral	... ..	17/- "	Suspenders, Cotton Bags	... ..	6/6 per doz.
" Double	... ..	28/- "	" " Silk Bags	... ..	14/- "
" Single Scrotal	... ..	34/- "	Clinical Thermometers	... ..	25/- "
" Double	... ..	52/- "	Elastic Gum Catheters	... ..	7/6 "

**TERMS**—5 per cent. discount Cash; 2½ per cent. discount Monthly.

## SURGICAL APPLIANCES.

### TRUSSES.

Common, Salmon & Ody's Cole's, Moc-  
Main, Scrotal, and all other most  
approved principles made to order.



PATENT 4,682. (Seamless.)



## MAGNETIC BELTS AND APPLIANCES.

Elastic Surgical Stockings, Knee Caps, &c.  
Patent Spiral Seamless Elastic Stockings,  
&c.  
Patent Pile Surgical Elastic Stockings.  
Elastic Supports for Lawn Tennis, Cricket,  
Lacrosse, and other Athletic Sports.  
Bath and Rubbing Gloves.  
Bathing Caps and Belts.

Trusses of every description.  
Poro-plastic Jackets.  
Bandages — Indiarubber, Elastic, Lint,  
Cotton, Sayres', &c.  
Chest Expanding Braces.  
Horse Ear Caps & Veterinary Appliances.  
Suspensory Bandages.  
Ladies' and Gentlemen's Belts.

Hot Water Bottles and Covers, Respirators, Inhalers, Bronchitis Kettles, Throat Sprays,  
Waterproof Coats, Cloaks and Driving Aprons, Footballs, Shin Guards, and Athletic Appli-  
ances, Druggists' Sundries, Invalid and Nursery Appliances, &c.

MANUFACTURER AND PATENTEE:

**J. H. HAYWOOD, CASTLE GATE, NOTTINGHAM.**

London Agent—HENRY C. QUELCH, St. Paul's Chambers, 1 Ludgate Square, E.C.

Patent Pile, Protected,  
14,618. The Pile lying  
over the Indiarubber  
Cords, protecting them  
and forming a smooth soft  
surface to the limb.



# R. H. BARRETT'S NEW PATENT BOTTLE.

THE ONLY REALLY PERFECT CAPPED BOTTLE FOR VASELINE, POMADE, DRY POWDERS, &c.

**PRICES** (in 5-gross Lots):—Fitted with STRONG METAL CAPS, CORK-LINED, in various colours, very attractive in appearance—1 oz., 12/6; 1½ oz., 13/6; 2 oz., 14/6; 3 oz., 16/; 4 oz., 18/ per gross.

Fitted with best BOXWOOD CAPS—1 oz., 15/6; 1½ oz., 16/6; 2 oz., 17/6; 3 oz., 21/6; 4 oz., 24/6 per gross.

*Chemists' and Perfumers' Bottles in great variety, Plain or Stoppered. Orders may be sent to the PRINCIPAL WHOLESALE HOUSES.*

## R. H. BARRETT,

FLINT GLASS BOTTLE WORKS,

THE OVAL, CAMBRIDGE HEATH, LONDON, E.

Telegraphic Address—"FOREFRONT LONDON."

[2]

### DISPENSING BOTTLES & PHIALS.

#### REDUCED PRICES.

3 and 4 .. .. 6 and 8 .. .. 12 .. .. 16 ounce.  
7/6 .. .. 8/6 .. .. 12/- .. .. 16/- per gross.

#### CRYSTAL (BLUE TINTED).

3 and 4 .. .. 6 and 8 .. .. 12 .. .. 16 ounce.  
9/ .. .. 10/- .. .. 14/- .. .. 18/- per gross.

#### WHITE PHIALS.

¾ .. .. 1 .. .. 1½ .. .. 2 ounce.  
3/8 .. .. 4/- .. .. 4/9 .. .. 5/6 per gross.

#### WHITE PHIALS (SUPERIOR QUALITY).

¾ .. .. 1 .. .. 1½ .. .. 2 ounce.  
4/3 .. .. 5/3 .. .. 5/9 .. .. 6/3 per gross.

## I. ISAACS & CO.

GLASS BOTTLE MANUFACTURERS,

25 FRANCIS STREET, Tottenham Court Road, LONDON.

BANKERS: LONDON AND WESTMINSTER BANK.

ESTABLISHED UPWARDS OF 50 YEARS.

### STOKES'

## PATENT CHECK TILL SYSTEM.

A SOUND INVESTMENT.



Each Till has only to display 2d. per week deficiency to return 15 per cent. on outlay.

30,000

Sales Checked for

3 SHILLINGS.

Terms and full particulars on application.

G. R. STOKES & CO., Limited, Hanley, STAFF.

## THE INHALANT

TRADE MARK



REGISTERED.

# "SPIRONE"

TRADE MARK.

FOR THE TREATMENT AND CURE OF ALL

## DISEASES OF THE LUNGS, WINDPIPE, NOSE & THROAT.

CLAIMS TO BE A

Specific for all Congestive and Inflammatory Conditions of the Respiratory Apparatus,  
And will be found efficacious in

## COUGHS AND COLDS, ASTHMA, BRONCHITIS,

Inflammation and Congestion of the Lungs, Pneumonia, Pleurisy, Whooping Cough, Croup, Diphtheria, Pharyngitis, Laryngitis, Catarrh, Sore Throat, Quinsy, Enlarged Tonsils, Hoarseness, Loss of Voice, Colds in the Head, Hay Fever, and all other Complaints of the Respiratory Organs.

None Genuine except such as bear the above Trade Mark "SPIRONE" and the Signature of the Inventor upon the Bottles, on the Label over the Cork, and on the Wrapper.

Retail Price 4s. 6d. and 11s. per Bottle. Set of Apparatus for Administration, 15s.

PAMPHLETS AND SHOWCARDS FREE ON APPLICATION.

THE SPIRONE COMPANY, LIM., Depot—17a Duke Street, LONDON, W.  
MANCHESTER SQUARE,



# KILNER BROTHERS

**MANUFACTURERS**

OF

**GLASS BOTTLES**

ALL SHAPES, SIZES, AND COLOURS,

FOR

**DISPENSING**

In Green and White Flint. All the required sizes in Flat, Oval, Round, Octagon, and Direct Square. The "K" Brand is well known, and is in constant and increasing demand.

**FEEDING.**

**"OUR BABIES' BOTTLE."**

Fitted in a large variety of styles to suit all classes of buyers

Careful attention given to quality of Bottles and Rubber.

Increasing sales testify to the satisfaction given by these Feeders.

**MINERAL WATERS.**

Codd's, Bulbs, and all the best Stoppered kinds ; full size and splits.

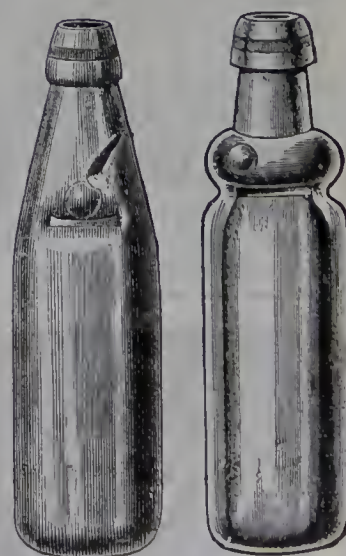
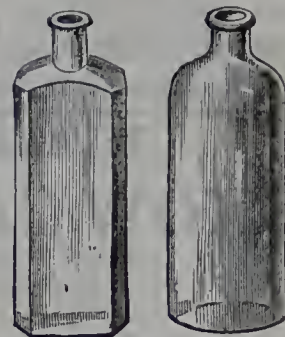
Also CORK BOTTLES to suit all tastes.

**VAN BOXES and CASES**

To contain above and many other kinds of Bottles.

BUYERS ARE CORDIALLY INVITED TO CORRESPOND.

*Samples, Price Lists, and Special Quotations for large quantities sent on application.*



**No. 3<sup>A</sup> GREAT NORTHERN GOODS STATION, KING'S CROSS, LONDON.**



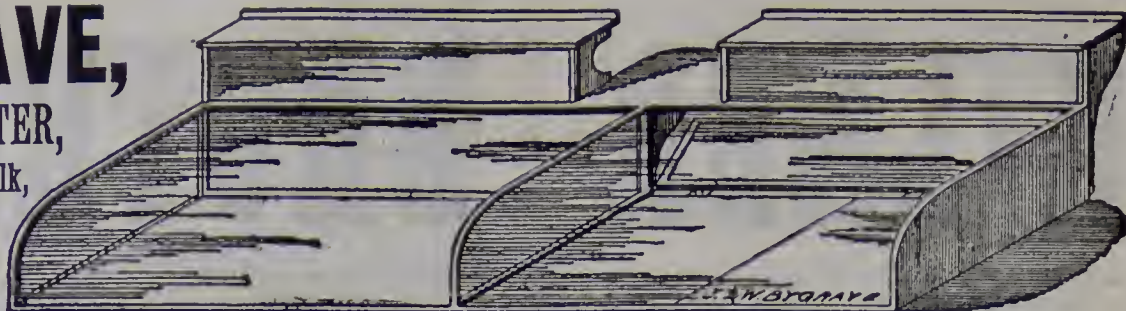
# BYGRAVE,

## SHOP FITTER,

111 Shepherdess Walk,

CITY ROAD,

LONDON, N.



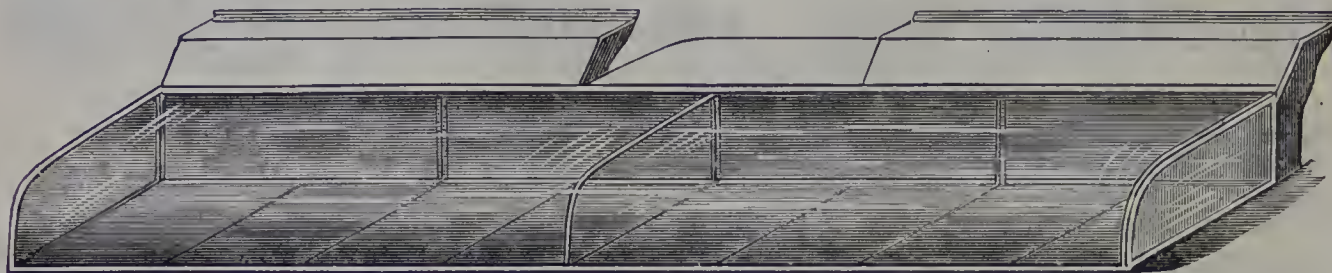
Bent-top plate-glass Counter Showcase, in French polished mahogany, or ebonized, with two upright mirror plate-glass fronted shelves, and table in centre for serving over, and mahogany falls at back lined with mirror plate glass, inside fitted with crimson velvet trays—if 5 ft. long, 18 in. wide, 8 in. high (total height 13 in.), £5 10s.; 5 per cent. off for cash.

# ELKANAH NATALI

(Established 20 Years),

## SHOW CASE MAKER & SHOP FITTER

MAKE MY OWN, AND WORK GUARANTEED. HUNDREDS OF TESTIMONIALS AND REFERENCES.



Removed from 207 to 242 Old St. (Shoreditch End), LONDON. Workshops—Henson St., E.C. (Only Addresses)  
No connection with any other house of the same name. Please address in full.

### “THE CHEMIST” DISPENSING COUNTER.

6 feet long by 2 feet wide .. £24  
If the Dispensing Screen only, £12

This handsome Dispensing Counter is manufactured in Spanish mahogany, and of the best workmanship, so that it will stand any climate. The counter has a solid mahogany top, and plate-glass case front. The centre part fitted to take sponge. A mahogany screen on top, consisting of two plate-glass cases, with shelves inside, and large plate-glass mirror in the centre, and three glass tablets with gold writing in ornamental mahogany carved work. The back of screen fitted with small shelves and a glass poison cupboard. The inside of counter fitted with strong counter drawers, label and cork drawer, open shelves, &c.



**NOTICE TO THE TRADE.**

In consequence of inferior Second-hand Goods being sold for our make, we have found it necessary to protect our reputation for best work with a Trade Mark, as above, and unless goods are so stamped we cannot be answerable.

## BOWLING & GOVIER

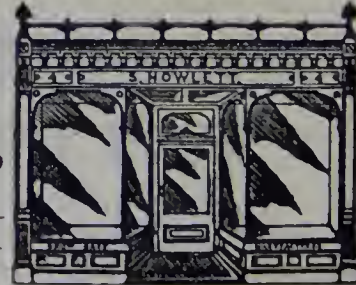
Manufacturers of High-class Shop Fittings,  
GUN ST., BRUSHFIELD ST.  
BISHOPSGATE, E.C.

ESTABLISHED 1830.

## S. HOWLETT,

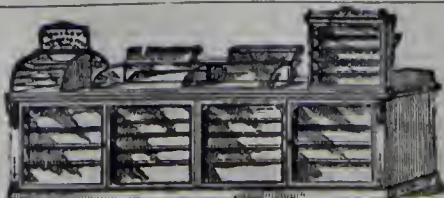
MEDICAL AND  
GENERAL SHOP FITTER,  
Shop-Front Builder and Show-Case Maker.

EXPORT ORDERS CAREFULLY PACKED AND SHIPPED.



SHOPS FITTED by Contract, in Town or Country, with every requisite, on the most improved principles, and at lowest prices.

NUMEROUS REFERENCES may be obtained of Leading Chemists in all parts of the Kingdom.



A LARGE STOCK of New and Second-hand Fittings and Cases to be sold very CHEAP.  
CABINET FITTER to the Pharmaceutical Society of Great Britain.  
PLANS and ESTIMATES SUPPLIED.

Manufactory and Showrooms—4 Lindley St., Sidney St., Mile End Road, LONDON, E.

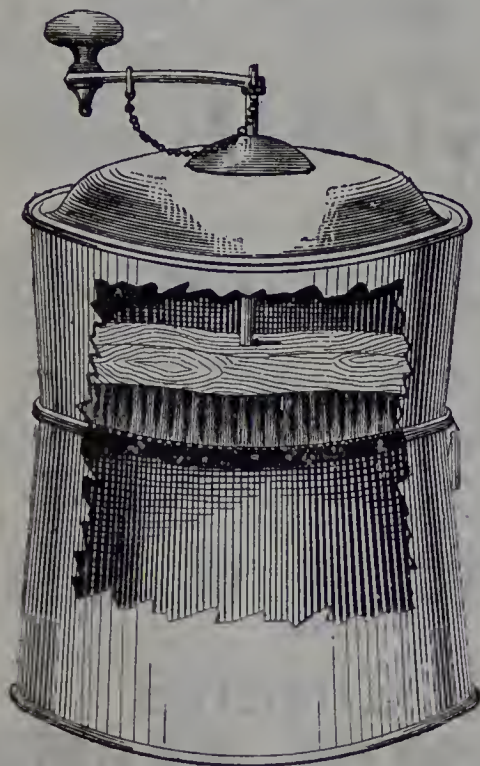


# WILLIAM TOOGOOD'S

## WAREHOUSE AND SHOW ROOM,

### BURLINGTON BUILDINGS,

### HEDDON STREET, REGENT STREET, LONDON, W.



### TOOGOOD'S BRUSH MIXING MACHINE.

To mix 3 lbs. Powder ...	...	...	12/- each.
To mix 1 lb. „ ...	...	...	8/- each.

All stock Machines are fitted with Sieves 60-mesh, but any other sizes can be supplied at same price.

### CROSSE'S SAFETY ENEMA PAN.

REGISTERED No. 138,518.



#### PRICES:

In White Earthenware ...	...	...	4/- each.
In Stoneware ...	...	...	2/3 each.

# THE LACTOTHERME

(Registered Trade Mark), Patented; or,

## INFANT'S PORTABLE FOOD STOVE.

THE BEST MEANS OF HEATING CHILDREN'S MILK.

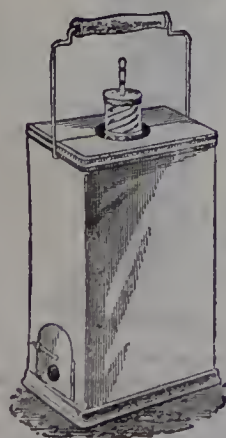
MAINTAINS A TEMPERATURE OF 98° F. SIX TO SEVEN HOURS.

DOES NOT CAUSE THE MILK TO TURN SOUR.

DESCRIPTIVE PAMPHLET POST FREE.

Prices: 6/-, 8/6, 10/- each.

[1]



Colonial and Foreign Enquiries and Correspondence solicited.



# CARBOLIC ACID.

Liquid, Crude and Refined, Crystals (Detached and Glacial, B.P.).

**SPECIALITY.**—Our Refined Liquid Carb. Acid is a bright pale colour, guaranteed 97 per cent. to 99 per cent., and free from all impurities, such as Sulphuretted Hydrogen, &c.

**CONTRACTS FOR 1891.**—We shall be pleased to submit very lowest prices for delivery during 1891 to large Buyers. State approximate quantities required.

**CARBOLIC POWDERS.**—5 per cent. to 20 per cent., from £6 per ton. Pink, White, or Grey Colours. Pink ditto, in large black and gold tin boxes, 1/- sizes, 4/6 per dozen; 1/6 sizes, 6/- per dozen.

**CREOSOL OR SANITARY FLUID.**—Half usual prices. Samples and quotations on application.

**BUY FROM THE MAKERS—THE CHEAPEST HOUSE IN THE TRADE.** [2]

**HAMILTON & CO., LTD.,** The Sovereign Chemical Works, WANDSWORTH, LONDON, S.W.



LONDON, 1884.

## CARBOLIC DISINFECTANTS



LONDON, 1884.

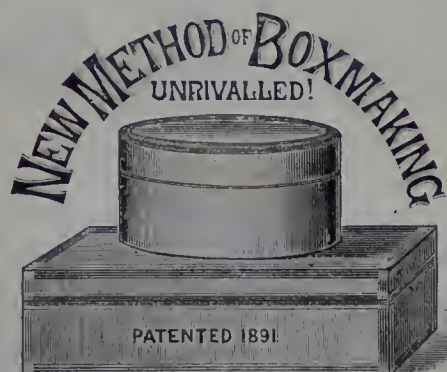
**BEFORE ORDERING ELSEWHERE** write for detailed Price Lists and Samples of

**POWDERS, ACIDS, FLUIDS, SOAPS, &c.**

TO

# ADAMS, WEBSTER & CO.

Wholesale & Export Disinfectant Manufacturers, **HACKNEY, LONDON, N.E.**



THE MACHINES CAN NOW BE SEEN AT WORK AS UNDER  
**TREMUS** TABERNACLE  
AND  
CASTLE STREETS LONDON  
FULL PARTICULARS ON APPLICATION. E.C

## DESTRUCTION OF RATS, &c.

## STEINER'S VERMIN PASTE

REGISTERED.

Is used in  
Australia,  
New Zealand,  
West Indies,  
India,  
Cape,  
etc., etc.



Is a Sure and Certain Destroyer of  
**RATS, COCKROACHES, MICE, AND BLACKBEETLES**  
**IT NEVER FAILS!!!**

The great strength of Steiner's Paste is not impaired in hot climates.  
Sold in 3d., 6d., and 1s. Glass Jars, and 2s. 6d. Tins.  
Wholesale and Export at the

**WORKS, HENRY ST., LIMEHOUSE, LONDON.**

ASK YOUR CHEMIST FOR IT.

Established 1868.

## G. B. KENT & SONS

Have been awarded the ONLY



A.D. 1777.

GOLD MEDAL



At the Paris Exhibition, 1889, for  
**ENGLISH BRUSHES**

See pages 169-172 WINTER ISSUE, January 31st, 1891.



# PETROLEUM JELLY,

PARAFFINUM MOLLE B.P.

(PIONEER BRAND) Registered Trade Mark.

Equal to and Cheaper than **VASELINE**.

FOR MEDICAL AND PHARMACEUTICAL PURPOSES.

White, Yellow, Veterinary, and Waterproof. All kinds put up in 1-lb., 5-lb., 7-lb., 14-lb., 28-lb., and 56-lb. Patent Tins, and in 300-lb. Barrels.

Pure Castor Oil, Cod Liver Oil, White Mineral Oil, Best Eating Olive Oil, Pale and Crude Carbolic Acid, Carbolic Powders, Sheep Dip, Benzine 50 per cent. and 90 per cent., Crude and Rectified Spirits of Tar, Stockholm Tar, Camphor Ice, Carbon Candles.

PATENT

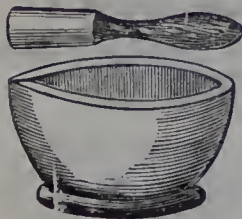
## CARBOLIZED PEAT,

THE NEW AND POPULAR DISINFECTING POWDER.

SEND FOR SAMPLES AND PRICES TO

**GRINDLEY & CO., Lim., POPLAR, LONDON, E.**

(ESTABLISHED 1868.)



### WEDGWOOD ACID-PROOF MORTARS AND PESTLES.

ALSO MANUFACTURERS OF  
Funnels, Evaporating Pans, Electric Battery Fittings, Bed Pans, Urinals, Medicine  
Spoons, Physic Cups, Sick Feeders, Bleeding Basins, Medicine Measures, Eye Cups,  
Inhalers, Nursery Lamps, Wall Tiles, &c.

PRICE LIST ON APPLICATION. SPECIAL QUOTATIONS FOR LARGE ORDERS.

Any Article not bearing the Stamped Trade Mark "WEDGWOOD" is not made by us.

**JOSIAH WEDGWOOD & SONS, ETRURIA, STOKE-ON-TRENT.**  
London Rooms: 87, ANDREW'S BUILDINGS, HOLBORN CIRCUS.

**GENUINE EMERY, EMERY CLOTH, AND BLACK LEAD.**

## JOHN OAKLEY & SONS,

MANUFACTURERS OF

Glass and Flint Paper, Emery and Glass Cloth; Emery, Black Lead, Emery Wheels  
Pumice, Putty Powder, Crocus, Urn Powder, Tripoli, Rouge, Plate Powder, Steel Polish  
Furniture Polish, Knife Boards, Brunswick and Berlin Black, &c.

### OAKLEY'S WELLINGTON KNIFE POLISH

Prepared expressly for Oakley's and other Knife Boards, Buff Leather Boards, and all the Patent Knife Cleaning Machines,  
Sold in Canisters with perforated Tops to prevent waste, at 1d., 2d., 3d., 6d., 1s., 2s. 6d., and 4s. each.

### OAKLEY'S NON-MERCURIAL SILVERSMITH'S SOAP,

For Cleaning and Polishing Silver, Plate Glass, Marble, &c. Tablets, 6d. each.

### OAKLEY'S "POLYBRILLIANT" (REGISTERED).

A Magio Pomade for Cleaning Brass, Copper, Tin, Pewter, Britannia Metal, &c. Never becomes dry and hard like other Metal Paste.  
Tins 1d., 2d., 3d., and 6d. each.

### WELLINGTON BLOCK BLACK LEAD,

In 1d., 2d., and 4d. Blocks, and 1s. Boxes.

**WELLINGTON EMERY & BLACK LEAD MILLS, Westminster Bridge Road, London, S.E.**  
Highest Award and Prize Medal, Philadelphia Exhibition, 1876; and Boston, 1883. Gold Medal, Crystal Palace, 1884.



**S.V.R., B.P.**

We wish to draw the attention of Chemists to the excellence of the spirit we supply for pharmaceutical purposes. We have devoted great care and attention to this branch and have made it a leading line.

That our efforts in this direction have been appreciated is proved by the number of *unsolicited* testimonials we have received from nearly every town in the country, of which the following is a specimen:—

GENTLEMEN,—

Please send 5 gall. 56 o.p. as before. I have pleasure in saying I have always found your spirit answer all tests, which is more than I can say of all I have had from different places, and also to be practically free from odour.

Messrs. Stephen Smith & Co.

Yours faithfully, JOSH. N. CUTTS, B.Sc., F.O.S.

In consequence of the increase in the spirit duty our prices will be—

S.V.R. 56 o.p. ... 19s. 7d.

Double Distilled, 56 o.p. ... 19s. 11d.

CASH WITH ORDER.

REDUCTIONS FOR QUANTITIES.

**SPECIALITY FOR PERFUMERY.**

This pure grain spirit, which has been thrice rectified and filtered through charcoal, is being largely used in making high-class Perfumes.

Price, 20/2, 56 o.p.; 20/8, 60 o.p. Cash with Order. Reductions for Quantities.

**STEPHEN SMITH & CO., BOW, LONDON, E.**

**S. V. METH.**

**JONES & COMPANY,**  
COPPERFIELD ROAD  
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LARGEST MAKERS IN THE KINGDOM.

We are prepared to supply METHYLATED SPIRIT in 5-gallon quantities at Lowest Prices.

**REDUCTIONS TO LARGE BUYERS.**  
SAMPLES FREE.

**BOORD & SON,**  
DISTILLERS, FOREIGN WINE AND SPIRIT MERCHANTS, AND METHYLATORS,  
ALLHALLOWS' LANE, & BARTHOLOMEW CLOSE, LONDON, E.C.

Quotations for **S.V.R.** Methylated Spirit and Finish on application.  
FINEST ORANGE WINE FOR QUININE.

**JAMES BURROUGH,** **S.V.R.**

CALE ST., CHELSEA, S.W.

and Methylated Spirit

AT LOWEST PRICES.

WRITE FOR QUOTATIONS.

**BEEESWAX.**

**W. H. B. PURE REFINED.**

In 2-lb. cakes, in cases of about 130 lbs.

" 1 " " " 130 "

" 1/2 " " " 110 "

" 1/4 " " " 110 "

" oz. cakes in 2-lb. parcels in cases of 54 lbs.

**W. H. B. PURE WHITE.**

In round cakes in 2-lb. parcels, or in oblong cakes, loose } in cases of 54 lbs.  
In oz. cakes in 2-lb. parcels } and 56 lbs.

Plain blocks of 7 1/2 lbs. in cases of 250 lbs.

**WHITE WAX.**

Plain round cakes in 2-lb. parcels in cases of 72 lbs.

The purity of these goods is certified by the following eminent chemists: S. P. Sharpless, State Assayer, Boston; J. W. Taylor, Associate of the Society of Public Analysts of Eng., Montreal, P. Q.; Edward Davies, F.O.S. and T. I. C. and O. Royal Institution, LIVERPOOL, Eng.; Barnard Dyer, D.Sc., F.O.S., F.I.O., Member of the Society of Public Analysts, 17 Great Tower Street, LONDON, E.C., Eng.; Wm. T. Wenzel, Analyst and Assayer, San Francisco, Cal., and may be obtained of any of the leading Wholesale Druggists in the Northern and Midland Counties.

We will deliver our goods in 5-cwt. lots ex quay, in any city which is the Terminus of a Steamship Line throughout the Kingdom, without trouble or expense to the Buyer.

Our Goods may be obtained in single Case lots from any of the Leading Wholesale Druggists in the Northern and Midland Counties, and of

**W. H. BOWDLEAR & CO., BOSTON, MASS., U.S.A.**

Cable Address: Office and Warehouse—36 CENTRAL WHARF. [Bowdlear, Boston.]



# WILEY'S CHEMICAL ESSENCE

FOR  
LAMENESS IN HORSES.

Agents Wanted in every Town. Handbills, with Name and Address, supplied gratis  
**50 YEARS' UNBROKEN SUCCESS.**

**SOLE MAKER & PROPRIETOR, J. ROOKLEDGE, CHEMIST, EASINGWOLD, YORK.**  
TO BE HAD OF USUAL WHOLESALE HOUSES.

**WALKER, TROKE & CO.**

WHOLESALE DRUGGISTS,  
82 CITY ROAD,  
LONDON, E.C.



SOLE MAKERS OF  
**GABRIEL & TROKE'S  
GELATINE CAPSULED  
HORSEBALLS**  
Alterative, Condition, Cordia  
Cough, Diuretic, Fever,  
Physic, and Worm Balls.

QUOTATIONS & SAMPLES FREE ON APPLICATION.

# SPERM OIL

**HUGH HIGHGATE & CO.**  
**PAISLEY, N.B.**

REFINERS OF  
**SPERM OIL & SPERMACELE**

SAMPLES ON APPLICATION.



*Used on the Royal Farms at Windsor, Osborne, and Sandringham, and by  
the principal Stockbreeders everywhere for nearly 60 years.*



## DAY, SON & HEWITT'S HORSE, CATTLE, AND SHEEP MEDICINES.

### THE CHEMICAL EXTRACT.

For assuaging pain and inflammation in all wounds, saddle galls, strains, bruises, swellings, and relaxed tendons in Horses. For paining after calving and lambing, and for swollen udders and sore feet.

2s. 6d. per Bottle; 1-dozen Box, 7s. 6d.

### THE RED DRENCH.

Celebrated for inflammatory disorders, such as fevers, pleurisy, foot-and-mouth complaints, yellows, surfeit, and red-water. Also for difficult calving and lambing. Admirably adapted for cleansing and checking feverish symptoms in Cows and Ewes after a bad time of parturition.

For Sheep, 8s. 6d.; for Cattle, 18s. per dozen Box.

### THE GASEOUS FLUID.

Unmatched for colic or gripes and debility in Horses, for colds, chills, shivering fits, flux and diarrhoea in Cattle, Calves, and Sheep. For Ewes weekly after lambing and blown Cattle and Sheep, its effects are marvellous.

20s. per dozen Box.

### THE GASEODYNE.

Used as laudanum in uncontrollable spasmodic pains and violent bowel complaints. Invaluable for parturition in Mares, Cows, and Ewes.

3s. 6d. per Bottle; 1-dozen Box, 10s. 6d.

### THE RED PASTE BALLS and RED POWDERS.

For ill-conditioned Horses and Cattle; invaluable after hard hunting or driving. For coughs, colds, staring coat, itching, swollen legs and want of strength. The powder given in the feed will produce fine appetite and tone.

7s. 6d. per dozen; 8-dozen Box, 21s.

### THE BLACK PHYSIC BALLS.

These Balls are matchless for thoroughly cleansing the system of all impurities, and for assisting in the expulsion of Worms. Their purgative action soon relieves Costiveness of the Bowels, and checks all Feverish Symptoms arising from gross habit.

Price, 8s. per dozen; Box containing 3 dozen, 28s.

### THE BRONCHOLINE.

The great and reliable remedy for Hush or Hoese in Cattle, Heifers, Calves, and Sheep. Its gaseous odour destroys the worm or parasite in the windpipe, removes the hard cough, and soothes the lungs and other organs.

2s. 6d. per Bottle; 1-dozen Box, 7s. 6d.

### THE "KEY TO FARRIERY."

A small work published by us on the general ailments of stock, their treatment and cure.

Large Edition, in Cloth, 2s. 6d.; Small Edition, 1s.

The Stockbreeder's Medicine Chest.	No. 1 contains a complete assortment of all our preparations for treating diseases of stock generally.	Price £6 6 0
The Stockbreeder's Medicine Chest.	No. 2 is suitable for ordinary Farm use, and contains a useful selection of the above Medicines.	2 16 6
The Horsekeeper's Medicine Chest.	No. 3 is arranged for large Horse Owners, Collieries, &c., and contains 12 specially selected Medicines.	5 5 0
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Prepared only by **DAY, SON & HEWITT, 22 DORSET STREET, LONDON, W.**

LIBERAL DISCOUNT TO FOREIGN BUYERS.

LIST AND PARTICULARS OF AGENTS ON APPLICATION.



**S.V.R., B.P.**

We wish to draw the attention of Chemists to the excellence of the spirit we supply for pharmaceutical purposes. We have devoted great care and attention to this branch and have made it a leading line.

That our efforts in this direction have been appreciated is proved by the number of unsolicited testimonials we have received from nearly every town in the country, of which the following is a specimen:—

GENTLEMEN,—

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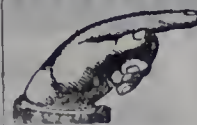


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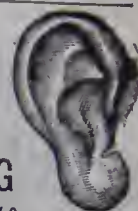
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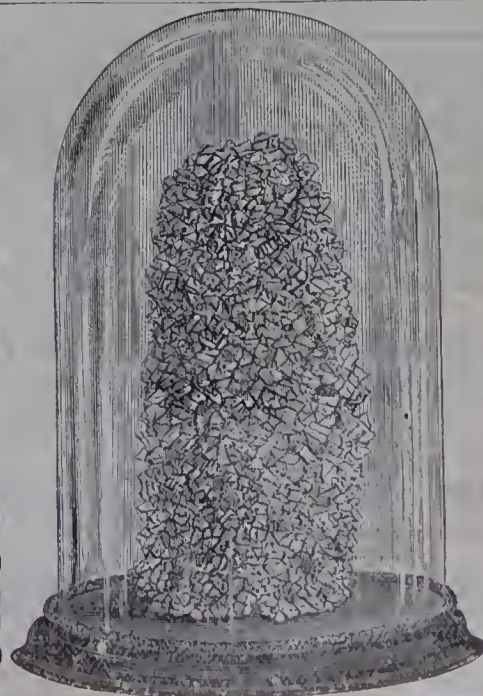
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# SEABURY & JOHNSON,

ORIGINAL MANUFACTURERS OF

## PHARMACOPŒIAL AND SURGICAL PLASTERS

IN RUBBER COMBINATION,

ANTISEPTIC DRESSINGS AND ABSORBENTS, &c.

### Manufacturers of **PLASTERS** of every Description.

Adhesive, Breast, Bunion, Corn, Court, Dental, Dermatological, Homœopathic, Isinglass, Kid, Medicinal, Mustard, Pharmacopœial and Surgical, &c. *In Rubber Combination, plain or porous, and spread on any material required.*

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Corrosive Sublimate, in bottles, 9/, 16/, 30/ doz. hots. Hydronaphthol, in bottles, 8/ & 16/ doz.

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DR. PENNY'S Adjustable (12 in a box), 24/ per doz.

**Ear Blisters.**

Right or Left, 2/ per doz.

**Darby's Dental Capsicum Plasters.**

(In boxes of 80 Plasters, 30/ per dozen.)

From the *British Journal of Dental Science*, January 15th, 1889.—These Plasters have been before the profession for some time, and those who have used them are unanimous in their encomium. They are, probably, the safest counter-irritants in the hands of the profession.

**Court Plasters**, in 50 Varieties, from 40/ dozen to 4/ gross.

**Mead's Rubber Adhesive Plaster.**

In 5-yard rolls, 12 inches wide, 5/ each. In 1-yard rolls, 7 inches wide, 14/ per dozen.

10-YARD SPOOLS—	{	Width	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3 inches.
		Price	12/	14/	16/	20/	24/	28/	32/ per dozen.
5 " "	"	"	9/	10/	12/	15/	18/	21/	24/ "

**S. & J. Surgeon's Rubber Adhesive Plaster**

Has almost entirely supplanted the old form of Adhesive, by reason of its superiority in all essential qualities. **PLAIN** or **POROUS**.

In 5-yard rolls, 7 inches wide, 6/6 each. In 1-yard rolls, 7 inches wide, 17/ per dozen.

10-YARD SPOOLS—	{	Width	$\frac{1}{2}$	1	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3 inches
		Price	18/	24/	30/	40/	50/	60/ per dozen.

**Belladonna Plasters**—Porous and Plain,  $5 \times 7\frac{1}{2}$  inches, 54/ per gross;  $7 \times 12$  inches, 10/ per dozen.

1-yard rolls, 7 inches wide, 27/6 per doz. 5-yard rolls, 5 inches wide, 102/; 14/ each, 7 inches wide, 126/ per doz.  
" " on red felt, 36/ per doz.  $5 \times 7\frac{1}{2}$  inches, 6/ per doz.  $7 \times 12$  inches, 12/ per doz. On swansdown, 36/ per doz.

**Belladonna Breast Plasters**, 6 inches, 4/6; 7 inches, 6/; 8 inches, 7/6 per dozen.

**Kid Plasters**, long shape, 5/, 6/, and 7/ per dozen.

**Camphorated Blister Plaster**, 27/6 per dozen yards.

**Strengthening Plasters**—Porous,  $5 \times 7\frac{1}{2}$  inches, 30/ per gross;  $7 \times 12$  inches, 72/ per gross.

1-yard rolls, 5 inches wide, 14/; 7 inches wide, 27/6 dozen yards. 5-yard rolls, 5 inches wide, 66/; 7 inches wide, 86/ per dozen.  
On red felt, "  $5 \times 7\frac{1}{2}$  inches, 36/ gross;  $7 \times 12$  inches, 144/ gross. " 12/6; " " 14/ each;

SUBJECT TO DISCOUNT.

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ORIGINALITY AND RELIABILITY.

QUALITY IS OF FIRST IMPORTANCE.



# "VINOLIA" URGES LEGISLATION AGAINST "POISONS IN SOAPS."

THOUGH Soap is an article of every-day use, and has been for years upon years, the public is perhaps as ignorant upon the subject of soap as upon any. It is hardly possible for one unacquainted with the subject to have any adequate conception of the enormous extent to which soaps are adulterated, contaminated and sophisticated. While a good soap should be made with fat and an alkali like soda or potash, resin is largely used to replace part of the fat in many, such as primrose, yellow and transparent soaps, because of its comparative cheapness. When resin and soda are boiled together, the result is a mass somewhat allied in appearance to soft soap, and if this resin compound be incorporated with ordinary soap made from fat, the whole will melt away quickly in warm water, and lather more freely than soap made with fat alone. The result is that resin soaps are more wasteful, and are not specially desirable for the skin. The writer remarked to a man in a soap factory the other day, who was shovelling his cwt. of resin into the boiling soap below, "What makes you put so much of it in?" The reply was, "Because we could not afford to use fat instead."

It is not to be supposed that the fats used for soaps are always good ones. Sometimes the oily mass floating upon the surface of sewers, or upon the surface of waters into which sewers empty, and fats oftentimes whose origin is not known are employed simply and solely because of their cheapness. This is no strange doctrine, but an actual fact. Fats are used in making soaps that should never be employed on a human skin. Many of them are putrid, rancid, and irritating, and pregnant with germs of disease. Supposing a skin is inflamed, irritated, or abraded, are these products to be recommended for it? If it is tender or delicate, what will be the action of these products upon it? It has been alleged that no small proportion of skin-disease has been caused by soaps—soaps even which have been largely advertised. The fact of the matter is that the public should really be guarded from such injurious products. We are told that many soaps are reeking with poisons. No one who is familiar with the subject denies that most of the common toilet soaps in the market are alkaline. Some of them are heavily laden with carbonate of soda, Glauber's salt, sand, French chalk and other matters to fill them up. Some of the white curd soaps contain as much as 40 per cent. of water, and are extremely alkaline. Is the public to pay for soap and get such stuffs palmed off upon it? But let us see the spirit in which the rank and file of soapmakers meet any suggestions regulating the manufacture and supply of soap. At a recent meeting of the Balloon Society the Editor of the *Hospital Gazette* read a paper on soaps. Prominent soapmakers were present, and when the subjoined resolution was submitted they opposed it, and with such effect that it was only carried by a majority of one. The ordinary reader asks himself why a motion of this kind was rejected by the manufacturers. It reads as follows:—

*"That, in the opinion of this Meeting, Legislation on the lines of the Adulteration of Foods Act is desirable in the interests of the public health, with a view to prevent the sales of adulterated, injurious, and fraudulent compounds now sold under the name of Soap."*

In other words, the soapmakers are in favour of a continuation of the present state of things, whereby a manufacturer may incorporate into his soap poisons, silicate of soda, sand, 30 per cent. of sugar, 20 per cent. of water, resin instead of fat, and anything else he likes out of a long list of adventitious matters. This opposition reminds one of the attitude assumed by the makers of oleo-margarine. These latter were not in favour of any legislative restrictions or supervision. In other words, they wanted to be allowed to sell oleo-margarine in place of butter without letting the public know what it was buying. As a matter of fact, if a soap contain a large quantity of water or sugar, or other admixture, it should not be sold as pure soap, and the fact that it contains such admixture should be stated on the box, circular, or tablet, the same as butterine should not be sold for butter, nor watered milk, nor coffee and chicory, nor sugar and sand for the genuine article.

Not content with the foregoing resolution, the soapmakers must needs introduce an amendment, and here it is:—

*"That, in view of the extraordinary development of soap manufacture in this country during the last ten years, this Meeting hesitates to place any Government restrictions upon the industry, feeling confident that soaps injurious to the skin are easily detected and rejected by the public."*

The amendment amounts to simply this, that the public is to have no criterion of what is a good or bad soap, except by trying it. If people perceive that it is *injurious to the skin*, they can discard it; but then the injury will have been done. What satisfaction is it to the man suffering with skin-disease, or to the mother whose child is afflicted with some affection of the integument, that he or she has found out that such a soap is impure and not fit to use? If soaps contain poisons, irritants, and obnoxious ingredients, why should not the public be protected against them? This is a question for the soapmakers to answer. But not all inferior soaps inflame the skin; for example, those containing sugar, resin, sand, a lot of water, &c., do not create intense inflammation, so that people are not suspicious of them, and may continue to pay for soap and get soap and sand, or soap and sugar, or soap and water, in place of the genuine product. If one asks for and pays for soap, why should he be supplied in part with sugar, or sand, or water?

Turning to "Vinolia" Soap, we can say it is made from edible fats which might be used in making the finest pastry. It contains no free alkali whatever, no resin is substituted for part of the fat, it is not treated with methylated spirits, and contains no sugar; moreover, it is free from silicate of soda, sand, and all those adventitious matters which are sometimes used to sophisticate soaps for the profit of the manufacturer. It embodies all the advances achieved in recent years in the manufacture of soaps. It lathers freely, wears well, and is satisfactory to wash with. We do not recommend it as a balm or a magic; we do not say that it will keep the skin for ever young, but we claim that for the toilet, nursery, and bath it is the acme of all that has been done in soaps. It has been tried by the most scientific, critical, and fastidious *clientele* in the world, and has uniformly stood the test. To compare it with some of the products called Toilet Soaps sold in the English market is to exhibit an absolute ignorance of the subject, or else self-interest and an egregious presumption. We give an analysis.